

# MANUFACTURERS' RECORD

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## Manufacturers' Record.

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BALTIMORE, MAY 3, 1906.

In a dispatch from Birmingham last week, reporting the purchase by Mr. Douglas H. Gordon of Baltimore of 1200 acres of ore property, a typographical error changed 51 per cent. of iron to 15 per cent. Of course, anyone reading the dispatch would naturally have seen the mistake.

E. P. Verner, manager the Carolina Chemical Laboratory, Columbia, S. C., writes to the MANUFACTURERS' RECORD:

I wish to thank you for the information recently obtained from you through the columns of the MANUFACTURERS' RECORD and the *Daily Bulletin*, as well as that furnished me from your office. I have been a reader of the MANUFACTURERS' RECORD for some years, and have followed with keen delight the rapid growth of the South as chronicled from week to week and month to month in the MANUFACTURERS' RECORD. The MANUFACTURERS' RECORD is an invaluable index to such growth and should be read by everyone interested in the industrial growth of the South.

### FREE DENATURED ALCOHOL.

It is sincerely hoped that reports from Washington that the bill which has passed the House of Representatives providing for the use in the arts of duty-free alcohol is to be killed by amendments in the Senate reflect a selfish wish rather than a possibility. So many million persons will be benefited by the bill becoming a law and so few persons can possibly be benefited by its not becoming an act that the Senate may well inquire and make public the names of the individuals or interests opposing the measure.

### SOUTHERN COKING COAL.

The MANUFACTURERS' RECORD has from time to time pointed to the certainty that with the development of the iron and steel interests of this country would come an increase in the

value of coking-coal lands in the South somewhat on a parity with the prices in Pennsylvania. Owing to the limited area of the Connellsville district and to the very large area of high-grade coking coal in portions of the South, it is not to be expected that the very high prices of Connellsville will be fully duplicated in the South, at least for some years to come. At the same time, it is quite probable that some of the exceptionally good coking-coal lands of this section, such as the New River and the Pocahontas and the Elkhorn field of Kentucky and others, must, with the enormous increase in the consumption of coal and coke, very materially advance in price over any figures that we have yet had in the South. Commenting on the steadily appreciating values in the Connellsville region, the *Iron Age* of last week says:

It is less than a decade since the original iron and steel consolidations which now make up the United States Steel Corporation, realizing the necessity of independence of fuel supply, turned to the Klondike region, being unable to acquire land in the upper Connellsville district. Much of the property was acquired at prices ranging from \$300 to \$500 an acre, and the recent sale of the largest remaining tract at \$1750 an acre fairly represents present valuations. As there have been no recent transactions in coking properties in the upper region, acreage values cannot be definitely stated, although it is understood that negotiations for a large developed property were recently discontinued when a price of \$2500 an acre was fixed as the lowest basis on which a transfer would be considered.

Advertisements of Southern localities offering special advantages for the location of manufacturing enterprises will be found on pages 84, 85 and 86.

### FOR MISSISSIPPI.

At the recent session of the Mississippi legislature, the department of agriculture and commerce was created and Governor Vardaman has appointed as commissioner of the department Mr. H. E. Blakeslee of Jackson. No better man could have been found for the position. Mr. Blakeslee has for several years, as secretary of the Jackson Board of Trade and as a leader in the "Greater Mississippi" movement, been a power of himself for the material development of the State and an inspiration for many other workers in the same direction. He is full of the news instinct that recognizes and seizes the opportunity to bring the resources of Mississippi into profitable notice, and the department which he has conducted for some time in the weekly press of the State telling of plans and accomplishment in industrial and agricultural development has been a most effective agency in developing a public opinion in Mississippi calling for special work by the State authorities in behalf of Mississippi progress. Comparatively speaking, Mississippi, viewed from the developmental standpoint, is still a young State. During the past 10 or 15 years, with the building and extension of railroads, with the exploitation of timber tracts and the bringing of new land under

cultivation, the wealth of the State has nearly doubled in value. But much more is yet to be gained. Vast stretches of fertile soil are to be brought under cultivation and many industries, small and great, are to be established. The new department of the State government under direction of Commissioner Blakeslee may be expected to be a powerful influence to that end.

### WOMEN'S WORK FOR THE SOUTH.

The Civic Improvement League of Columbia, S. C., an organization of women, has done an important work for the South in publishing a report of a plan for the improvement of their city made by Messrs. Kelsey & Guild, landscape artists, of Boston, Mass.\* The report is of the most comprehensive character, with not too much emphasis of detail, but dealing broadly and thoroughly with the main objects involved in the scheme of a general beautifying of the city. It is in these general propositions that the chief value of the handsomely-illustrated publication lies. Dealing, of course, especially with conditions at Columbia, they are based upon the experience of such cities as Boston, Washington, Harrisburg, Louisville, Detroit, Providence, Hartford, New York, Seattle, Philadelphia, Chicago, St. Louis, Buffalo and Cleveland, which are either spending millions of dollars in street improvement and in parking or are considering plans to such an end, and is consequently of such great value to Southern cities and towns which have been somewhat backward in this particular that the report should be in the hands of the members of every improvement association, and where no such organization exists the women of the community should at once follow the example of the women of Columbia and organize for their city's betterment. This task is one peculiarly woman's. To a far greater extent than men women have the enthusiasm, the love of order, the sense of beauty and a care for details essential to any scheme for giving a city the attractive appearance that it should have. After all, civic improvement is simply civic housekeeping in action. And an important part of that is keeping the city clean and healthy and developing everything about it that may please the eye. Successful civic housekeeping demands a vast amount of patience, persistence and vigor, in which most women have the better of most men. It necessitates the doing of much that may at first seem petty, but in the end will be of note. Sewerage, street cleaning, water service, etc., are properly in the domain of municipal authorities. But municipal authorities are not always alert to the occasion, or are not always properly supported by

the public sentiment that will give them the means to carry out progressive ideas. Women's leagues or clubs can be made most efficient agencies for developing the right sort of public sentiment, and in the meantime may accomplish much definite work in bringing about the removal of unsightly fences, the planning of attractive gardens, the arrangement of shade trees along the highways, the keeping of streets free from waste paper and other rubbish and the general freshening up of dwellings and public buildings. Such results depend largely upon individual action, and the members of women's organizations may bring such action about by personal example or through personal appeal. In doing so, they will surely develop the public opinion which the city authorities may crystallize into definite accomplishment on the lines suggested in the report for the Civic Improvement League of Columbia.

### FOREIGNERS FOR THE SOUTH.

What the South may expect through immigration from abroad as a source of relief from its labor problem was suggested in the landing one day last week of more than a thousand Poles, Russians, Jews, Germans, Bohemians and other Europeans at Galveston, most of them destined for Texas points and described as a healthy, strong-looking lot of men, women and children, ready and willing to hustle for an honest living. They came by one of the vessels of the North German Lloyd Steamship Co., and the experiment of establishing a line direct from Bremen to Galveston has been so successful that Mr. Friedrich von Pils, a director of the company, who has been studying conditions in the South, announces that on his return to Germany he will recommend the establishment of another line to New Orleans, which he regards as the gateway to the great agricultural States of Louisiana, Mississippi, Alabama and Georgia. In an interview with the New York *Herald* Mr. von Pils says that European immigrants are beginning to learn that there is something more in America than New York, and he suggests that Southern States in need of good farmers, of whom hundreds of thousands will arrive in this country within the next few years, co-operate with his company in bringing the South to their attention. He expresses the belief that while Italy will continue to send immigrants here and Russia will continue to pour Jews into the cities, the next flood of immigration will come from the German districts of Southern Russia, Roumania, Bulgaria and Hungary, and that there will be a type of the men that the South needs. He says:

The people who are now turning their eyes to America are agriculturists, and I fully expect to see a great exodus of them to your shores. Some will go to South America, but the great mass will strike out for America, and their destination will not be the centers of population. They will want to cling to

\*The Improvement of Columbia, S. C. Report to the Civic League, Columbia, S. C., by Kelsey & Guild, landscape artists, Boston, Mass. Price 50 cents. For sale by the League.

their occupation—that of tilling the soil. The German residents of the countries I have named are powerful men, of exemplary habits, and their idea of success in life is to have homes of their own and to rear healthy families.

These people would be a boon to the South. They are accustomed to temperature and soil much the same, and would bring about an almost magical development of the great area which now lacks proper cultivation. They are natural farmers and hard workers. They will start a new race in the South—will be the real pioneers. Twenty years from now, I confidently predict, America will be glad she left her doors open and pointed the way to the land of the cotton fields.

There need be no fear in America that Europe is unloading upon her her undesirable population. It is quite true that many of the immigrants, notably from Italy, are not the best sort of citizens, but those who come from central Europe are the kind of people that Europe does not wish to lose. Many of those who come from Italy spend part of the year here and return to their homes with their American earnings. This is a custom which should be discouraged. But in the case of the people from Hungary, Bohemia, Roumania, Bulgaria and other parts of Europe, they emigrate for good. They sever all ties abroad and start out with the determination to link their fortunes with those of America and to send for their relatives as soon as they can scrape together sufficient money.

Texas can tell the rest of the South what the German is in agriculture. Half a century or more ago many Germans settled in that State, and, like their fellows in other parts of the country, have become substantial elements and thorough Americans. If the later comers approach them in qualities of industry and thrift, the South cannot hesitate for a moment to encourage hundreds of thousands of them to people that section and to turn hundreds of thousands of acres of fertile land, now lying idle or to be brought into the market as lumbering operations advance, into productive farms. Half a million progressive white farmers brought into the South would do much toward solving the negro problem there as far as it affects agriculture. They would either compel the negro to move on or to adjust himself to a condition which must be his for many centuries, if he is to be of permanent value to himself or to the country.

But the need of hundreds of thousands of workers is felt in other lines than agriculture. Only the other day Mr. C. H. Ackert, fourth vice-president of the Southern Railway, was quoted by the Nashville American to the effect that railroad labor is scarcer now than it has been for many years, and that before the summer is over the demand will be the greatest ever known in the country. He said:

Not only the Southern, but every other railroad in the country needs labor, and I take it that the demand this summer will be phenomenal. Heretofore the South has had as much labor as it could use, except at short intervals during the cotton season, but this year labor will be short all the year. There is more work in progress throughout the South than there ever has been, and the Western, particularly Northwest and Southwest, roads are sending everywhere for laborers. While they will not draw very heavily on this section, they will get some and prevent the shifting laborers from coming this way. Naturally, many railroads throughout the Southeast will be unable to accomplish all they have planned to do on this account, but looking at the situation in a general way, all this is encouraging.

The story of the railroads in repeated in the mining districts, in the lumber camps, at the furnaces, in the cotton mills, and, in fact, in almost every field where the work of Southern development is waiting to be done thoroughly. Immigration offers the only possible relief.

In the article "New Railroads in the South," which appeared in the last

issue of the MANUFACTURERS' RECORD, the grade of the South & Western Railway against loaded coal trains was inadvertently given as 1 per cent., when it should have been one-half of 1 per cent., compensated, as stated in the article on that railroad published in our issue of April 12. Mr. Wm. A. Hankins, principal locating engineer of the South & Western, writes from Bristol, Va.-Tenn., to the MANUFACTURERS' RECORD that the only place on the line where a 1 per cent. compensated grade against southbound trains is employed is in "The Breaks," for a distance of 10 miles, where helper engines will be used.

#### PROGRESS OF THE STEEL CAR.

Recent equipment orders by railroad companies indicate that the record of car contracts during 1906 will show a much larger percentage of steel cars ordered than in 1905. Although complete statistics of contracts for all steel or steel underframe cars last year are not obtainable, careful estimates indicate that from 40,000 to 45,000 of such cars were ordered in the United States during that period. The demand for steel cars has increased yearly every since their construction began, seven or eight years ago, excepting that 1902 showed a remarkably large rush of orders, especially for big coal cars, the economic value of which was then just beginning to be generally appreciated. Since then the use of steel in car construction has extended from freight equipment to passenger coaches, and it is anticipated that before long some of the leading railroads will have their fastest trains composed of all steel or steel underframe equipment. The success of the steel passenger car is proven, and the adoption of all steel or steel underframe postal cars may be expected to hasten their general adoption in fast express service. The Santa Fe system is already using several postal cars of this type and is reported to be building about 40 more of the same kind in its shops.

Last year was a time of big car contracts, and the estimate of 40,000 to 45,000 steel cars ordered shows a percentage of only 11.75 to 13.25 of the total number of cars for which orders were then given. This, while not a large proportion of the whole, displays a decided gain in the popularity of these cars, the value of which for mineral traffic is unquestioned, and the demand for them in other branches of railroad service is steadily increasing. Heavy requirements will be made upon the steel manufacturers this year by the principal car-building companies for material, and a large proportion of the new equipment produced therefrom will go to railroads in the South, in some parts of which car shortages last year embarrassed both commerce and industry.

It is notable that the use of freight cars built wholly or in a large part of metal probably began on a Southern line. Forty or fifty years ago the Baltimore & Ohio Railroad Co. built coal cars of iron, and also a number of box cars of the same material. These were used for some years, and most of them were either worn out or economically obsolete when retired from service. As compared with modern freight cars, this old-style equipment was of small dimensions, and the advantages of metal construction were not therefore so apparent as they are now. Moreover, the cheapness of wooden cars in those days, as compared with iron cars, was an inducement to use them instead

of the metal construction equipment, so that for many years the Baltimore & Ohio built only wooden cars. But when the return of the use of metal coal cars came about, the road which was a pioneer in their employment was among the first to order from the steel car builders a liberal supply of large capacity hopper gondolas. And this idea, brought forth half a century ago, has extended to foreign countries. Noting the success of steel cars in America, several of the English railroads are now using large cars built of steel for handling their mineral traffic, and the employment of this style of equipment is spreading in other lands.

Undoubtedly, railroads in the South, for the development of its mineral resources, will, in the years to come, be among the largest if not the greatest users of steel-built coal and ore cars in the world. The wealth of coal and iron in the States through which the Appalachian mountains and their spurs extend is so vast that the owners and distributors thereof will be called upon to supply a great part of the world's needs for those materials. To perform this work ample railroad facilities of the best type will be required, and although the yearly orders for steel cars now appear to be of magnitude, the future will disclose annual equipment contracts of such size as to make those of the present day look small in comparison therewith. Besides, the very demand for this type of cars will contribute tremendously to the expansion of the iron and steel industries of the South as well as of her car-building plants. Truly the metal car may be regarded as one of the most potent factors in the development of this country, and, in fact, of the world.

#### SOUTH'S DUTY TO ITSELF.

Folks in the South or in other parts of the country, enthusiastically urging the South to "assert herself" politically and to resume "her proud position as the director of the destinies of the nation," are given some words of wisdom by the Portsmouth (Va.) Star as follows:

This is no doubt the opportunity of the South. This is the period of sunshine in which she can make hay. There has not been a time for 40 years during which the opportunity for minding her own business was so full and free and inviting for the South. She should make use of the opportunity. There is no doubt of that. The question is, how?

This general proposition is epitomized and the question is answered by the Star in the extremely practical suggestion that instead of wasting time on "national affairs," and especially in getting too deep into national politics, the South should recover its lost industries; that is to say, should assume the industrial position which its abundant natural resources justify. Under existing circumstances, as one views the attitude of a number of Southern leaders in Congress toward such national questions as the tariff and the relation of the national government toward transportation and industry, it would seem that any effective asserting of itself by the South under such leadership in national politics would benefit neither the South nor the rest of the country. To be sure, there are men in public life in the South fully capable of political leadership for the good of the whole country, including the South. But for the moment they have not the weight in national affairs that they should have. There are, too, many Southern men not in political life who, in other public

affairs, as leaders in material development, have demonstrated signal capacities for leadership in politics. Such men, however, know that talk of the South's taking charge of national affairs, of assuming leadership in politics, while very pleasing to a certain form of Southern consciousness, is the creature of a dream that no really capable politician could have. They feel that the part which the South is to play in national affairs is not politics, but statesmanship; they know that the surest means to postpone the time when the South, equipped through the development of its material resources to take a position of natural leadership in national affairs, may evolve that statesmanship is to keep it involved in the politics which talks of a Southern man for President, or of the South's dominating the machinery of this or that party.

The Mechanical Manufacturing Co., Philadelphia, Pa., in a letter to the MANUFACTURERS' RECORD says:

We find your journal one of the best advertising mediums that we have so far tried. It appears to reach a most wide and varied class of trade throughout the extreme and middle South, and we trace a great many inquiries that we receive to the MANUFACTURERS' RECORD as their source.

#### THE 1910 SOUTHERN EXPOSITION.

Mr. Robert F. Maddox, chairman of the committee of 25 men representing the people of Atlanta in preliminary work for the Southern Exposition in 1910, has announced that if the exposition is to be held \$300,000 of additional subscriptions to its capital stock must be raised at once in order to secure the \$500,000 of donations which await the completion of this fund. The matter has reached a point where it has been determined to hold a mass-meeting on the evening of May 8, and the Atlanta newspapers, with the slogan, "we must not fail," are urging citizens to complete the subscriptions to the capital stock of the exposition even before the mass-meeting assemblies. It is felt that a few days' renewed activity on the part of the committee will bring the matter to a successful issue, and it is pointed out that the insurance men, the real-estate men, the wholesale trade, the packing-houses, the fertilizer companies, the drug trade and many manufacturing lines have not yet been heard from in the matter of subscriptions, and that they may be expected to do all that is necessary to assure at Atlanta in 1910 an exposition of the wonderful progress of the South in this generation.

#### FOR SAN FRANCISCO.

Mr. R. B. Naylor, secretary Wheeling Board of Trade, Wheeling, W. Va., writes to the MANUFACTURERS' RECORD as follows:

"In reference to your article on 'The South to the Relief of San Francisco,' I beg to enclose the following, which shows what we are doing here."

The enclosure is a clipping from the Wheeling Register, showing that up to April 25 Wheeling had raised \$8350.60 for the San Francisco sufferers, and that on that day \$7000 had been forwarded to New York in the following letter to Mr. Jacob Schiff, treasurer New York Red Cross Society:

"Dear Sir—In accordance with the recommendation of President Roosevelt regarding the disposal of San Francisco relief funds, I take pleasure in enclosing New York draft for \$7000, collected in this city for the California sufferers, for which please acknowledge receipt. We expect to add an additional sum to the above as soon as all pledges are paid, which will be in the next day or two. The



relief movement here was directed by a committee appointed by the Wheeling Board of Trade, and the fund was raised entirely by voluntary subscriptions, ranging from 10 cents to \$1000. Trusting our contribution will help the good cause, and that you will see that the money reaches the proper hands, I am,

"Yours very truly,

"H. C. FRANZHEIM,

"President Wheeling Board of Trade."

#### SOUTHERN ARCHITECTS BUSY.

In the MANUFACTURERS' RECORD was published last week, as an indication of building activity in the South, a statement from an architect in Florida of the buildings in which he is interested. Below is published the work at present in the office of Mr. H. H. Huggins, architect, Roanoke, Va., aggregating more than \$210,000:

Methodist church, East Radford, Va., \$10,000.

Presbyterian church, Bluefield, W. Va., Wilson & Seay, Lynchburg, contractors, \$22,000.

Residence, S. H. McVitty, Salem, Va., not let, \$6000.

Residence, A. G. Crosby, Roanoke, Va., not let, \$8000.

Residence, Bruce Hunt, Roanoke, Va., not let, \$10,000.

Church for High-Street Baptist Church, Central Manufacturing Co., contractor, \$28,000.

School building, Roanoke city, Va., contract not let, \$14,000.

Printing establishment for Stone Printing & Manufacturing Co., E. Tatterson, contractor, \$43,000.

Store building, Virginia Brewing Co., J. F. Barber, contractor, \$6000.

Park Skating Rink, E. Mahony & Son, contractors, \$6000.

Residence, S. M. Lawrence, Suffolk, Va., \$3500.

Warehouse for J. T. Gibson estate, C. D., contractor, \$5000.

The National Bank building, Petersburg, Va., Geo. B. Keeler & Son, contractors, \$30,000.

Opera-house, East Radford, Va., for H. C. Tyler, not let, \$25,000.

#### PENSACOLA.

In his report for the last year, now being circulated in attractive pamphlet form, Mr. W. C. Jones, secretary of the Chamber of Commerce of Pensacola, Fla., shows that during the year the value of exports was \$16,258,732, a gain over the preceding year of \$1,265,075; the value of imports \$667,018, the value of resin and spirits of turpentine handled \$5,000,000, the value of jobbing interests \$4,500,000, and the transfers of real estate 1790. The assessed value of real and personal property in the city, which has 27,000 population, is \$11,646,997. Secretary Jones suggests that a brewery, a cracker and cake factory, a candy factory, a broom factory, an overall factory, a soap factory, a baking-powder factory and cigar factories would pay at Pensacola.

#### THE SOUTHERN FARM MAGAZINE.

In its May issue the *Southern Farm Magazine* urges the South out of its increasing wealth to provide adequately for the education on right lines of both its whites and its blacks. It points out that if the money representing but one-tenth of the wealth now accumulating at the rate of \$3,000,000 a day should be spent upon the elementary and secondary education of white children the South would be spending nearly \$110,000,000 a year upon an investment that would mean enormous advantage to the South of the immediate and distant future. Assessed values of property in the South of between \$6,000,000,000 and \$7,000,000,000 place the South in a position to begin doing its duty

to its white children and to itself and bar the South from any justifiable appeal for outside aid of any kind for the education of its white or black children. Largely contributing to the increase of wealth in the South is the expansion of diversification in farming, which policy is a direct incentive to farmers from other sections to move to the land where everything that may be grown in any other part of the country may be raised, and much more besides.

Two articles of special interest in this issue of the *Magazine* are the "Predicament of the Tobacco Planter," by William E. Dibrell, and "Farming in the Rice and Oil Belt," by S. L. Cary, while the statement before a congressional committee by Nahum Bachelder on the value of untaxed alcohol to the farmer will prove of interest to thousands in the South. Prof. Andrew M. Soule deals with a number of practical farm questions, and the other departments are full of interesting material for the home circle and the general reader.

The *Southern Farm Magazine* is published monthly by the Manufacturers' Record Publishing Co., Baltimore, Md. Price \$1 a year.

#### UNAPPALLED.

The earthquake-week issue of the *Mining and Scientific Press* of Berkeley, Cal., was a sheet of paper printed on one side only. The publication's records, its library, the notebooks of its editors, the manuscript ready for the printer for the issue of April 21 and the whole plant of its printing-house were buried in the ruins of San Francisco. But its editor, Mr. T. A. Rickard, was unappalled by the calamity and managed to send out his broadside, full of optimism, and announcing arrangements for a complete issue on April 28. The publication's motto is "science has no enemy save ignorance." It might assert hereafter, "the *Mining and Scientific Press* cannot be downed by an earthquake."

#### THE COTTON MOVEMENT.

In his report for April 27 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 239 days of the present season was 9,861,231 bales, a decrease under the same period last year of 1,620,621 bales; the exports were 5,560,921 bales, a decrease of 1,304,964 bales; the takings were, by Northern spinners, 2,030,498 bales, an increase of 100,206; by Southern spinners, 1,715,613 bales, an increase of 59,509 bales.

#### MODESTY?

A telegraphic account of Andrew Carnegie's Saturday speech at Ottawa contains the following:

"Sir Wilfred Laurier, he declared, was one of the five greatest men of the world. Booker Washington was one. There was no use mentioning the others."

Can it be possible that the other three are all condensed and rolled into one, the laird himself? Such modesty!

#### FOILED AGAIN!

What a shame that Father Sherman's "March to the Sea" should have been permitted to begin just after the sending of the cruiser Columbia to New Orleans for the Confederate reunion "had done much to break down sectional lines" for at least the tenth time in the past five years! Rot!

The Commercial Club of Hattiesburg, Miss., has been organized with Dr. W. W. Crawford, president; A. F. Thomson and L. L. Major, vice-presidents, and A. C. Sherry, secretary and treasurer.

The Business Men's League of Cairo, Ga., has been organized with Messrs. T. Wight, president; W. B. Roddenberry, vice-president; R. C. Bell, secretary, and W. H. Searcy, Jr., treasurer.

#### GRAIN AT NEW ORLEANS.

##### Railroad Officials Determined to Maintain the Position of the Port.

[Special Cor. Manufacturers' Record.]

New Orleans, April 28.

The effort of many local grain exporters, acting together, to induce the New Orleans Board of Trade to institute proceedings before the interstate commerce commission against the Illinois Central Railroad and the Central Elevator & Warehouse Co., a subsidiary corporation, and the Texas & Pacific Railroad, owners of grain elevators in New Orleans, to compel them to discontinue the payment of a one-cent "elevator charge" to the grain companies to whom the elevators are at present leased, has resulted in an expressed determination on the part of Illinois Central Railroad officials not to diminish one whit their efforts to maintain the position of New Orleans as a grain-exporting port, and not to cease in any particular their endeavor to make this port the greatest grain-shipping port in the world.

So far as the Board of Trade is concerned, its position has been neutral as between the alleged interests of the New Orleans grain men and the lessees of the elevators, which are Chicago and Kansas City concerns. When the petition of the New Orleans exporters, asking the Board of Trade to bring the matter before the interstate commerce commission, was received, the directors of the institution referred the matter to the freight and transportation and the grain committees, and these committees, acting jointly, called a hearing at which all parties were invited to be heard. Four groups of persons interested in the controversy appeared: The railroads, through their traffic agents and their attorneys; the lessees of the elevators, the New Orleans exporters and Illinois grain buyers, the latter only indirectly interested in the controversy.

The story of how the Illinois Central and the Texas & Pacific railroads quadrupled the exports of grain through New Orleans within two years was an interesting one as told by General Traffic Manager T. J. Hudson of the Illinois Central Railroad. The great Western grain exporters, who had been shipping through other ports, were induced to become interested in New Orleans, and traffic arrangements with the Burlington and Northwestern railroads made it possible to move the product to this city. The two immense elevators of the Illinois Central at Stuyvesant Docks were leased by the Central Elevator & Warehouse Co., one to the J. Rosenbaum Grain Co. of Chicago and the other to the Harris-Scotton Company of Chicago. Similar efforts of the Texas & Pacific Railroad resulted in a lease of the elevators at Westwego, the terminal of the Gould lines in New Orleans, to the Hall-Baker Grain Co. of Kansas City. The J. Rosenbaum Grain Co. of Chicago also secured a lease on the Chalmette elevator of the New Orleans Terminal Co.

The terms of the leases made the lessees the beneficiaries of an "elevator charge" of one cent a bushel on all grain handled through the elevators, no matter whether the grain was handled by the lessees or other concerns. Certain other provisions in the leases were inserted to protect any concern which might desire to ship grain through New Orleans, and, at least in the Texas Pacific leases, the significant provision appeared that in the event the "elevator charge" was declared illegal by the interstate commerce commission, the leases should become null and void.

Two general complaints were set forth by the New Orleans exporters—first, that the leasing of every elevator in New Orleans to outside exporters compelled the New Orleans exporters to put their grain through the houses leased by competing

concerns, subject to manipulation, and second, that the one-cent "elevator charge" was in effect a rebate, enabling the lessees to dispose of their product at a lower price than others could.

The charges were met by two general statements—first, that the one-cent elevator charge did not sufficiently compensate for the risk in and expense of operating the elevators; second, that under the lease and the supervisory control of the owners of the elevators there could be no manipulation, and third (appealing to the interest of the Board of Trade in the business of the port), that an important increase in the grain exports of New Orleans, in competition with other ports, was impossible except by resort to inducements identical with or similar to those held out by such competing ports.

To a representative of the MANUFACTURERS' RECORD President Stuyvesant Fish, Second Vice-President J. T. Harahan and General Traffic Manager T. J. Hudson of the Illinois Central each expressed his opinion that the Illinois Central could not be deterred from its course by the complaints. Mr. Fish said:

"The Illinois Central is a big institution. New Orleans is a big city. In obtaining grain for movement over our lines we must be in touch with the big exporters as well as with the small shippers. If we did not other lines would handle the business and other ports would handle the exports. The allegation that the terms of our lease result in rebates is without the slightest foundation. The Illinois Central does not discriminate in favor of one patron as against another."

Mr. Hudson stated that, so far from being inclined to defer to the New Orleans exporters, the traffic department of the company would continue to interest other Western exporters in New Orleans on the same terms that the present lessees are operating through this port. Last year, he said, he attempted to interest three other concerns doing an exporting business that compares favorably in volume with that done by the present lessees, and, although the attempt failed then, there was hope that it would succeed this year, and in case of success New Orleans would at once assume the place of the greatest grain port in the United States.

In the meantime, the New Orleans exporters are anxiously awaiting the decision of the two committees as to its recommendation to the Board of Trade.

The New Orleans Lumber Exporters' Association has been organized with the view, as laid down in the constitution of the association, "of improving the conditions relating to the business of exporting forest products and of affording to its members all the facilities, advantages and protection derived through co-operation." Any exporter of forest products, of whatever character, is eligible to membership, which thus far includes 24 exporters of yellow pine and hardwoods, some of which have offices in neighboring cities. The association is now seeking a permanent secretary or commissioner, in addition to the following officers, who serve without compensation: President, J. H. Hinton of Camp & Hinton; vice-president, S. J. Sutherland of S. J. Sutherland & Co.; secretary-treasurer, Ludwig Haymann, manager of H. Forschheimer, Hibernia Building.

C. W. Goodyear of Buffalo, N. Y., vice-president of the Great Southern Lumber Co., while in New Orleans April 28 closed contracts for the building of a mammoth saw-mill plant, with all accessories, at a point on the Bogue Loosa river and the New Orleans & Great Northern Railroad, to be known as Bogalusa. In letting the contracts Mr. Goodyear represented what is known as the Goodyear Syndicate, own-

ers of the Great Southern Lumber Co. and the New Orleans & Great Northern Railroad. It was stated that the total cost of the mill plant and the necessary residences for managers, foremen and laborers and other accessories would be \$1,500,000. The mill plant will be constructed of steel and concrete, with the view to making it fire-proof throughout. It will be erected by the American Bridge Co. of Pittsburg, and will include the saw-mill, power-house, dry-kilns, docks, planing mills, etc. T. J. Shea of New Orleans was awarded the contract for doing the excavating and laying the concrete foundations. Filer & Stowell of Milwaukee and the Berlin Machine Co. of Beloit will furnish the machinery. Stevenson & Adams of Pittsburg secured the contract for building 40 houses for managers and clerical force, each to cost \$1300, and Bowen & Thomas of Brunswick, Ga., were given the contract for erecting 200 houses for the laborers. The plant will be completed by March 1, 1907, and will be modern in every respect and capable of 600,000 feet of lumber

daily. The product will be chiefly yellow pine, which will be supplied the mill from the vast tracts of timber lands owned by the syndicate in St. Tammany and Washington parishes. The town of Bogalusa, Mr. Goodyear said, would have not less than 10,000 inhabitants when the mill was ready to begin operations. It will employ 2000 men.

It was announced that the New Orleans & Great Northern Railroad had entered into a contract with the New Orleans & Northeastern Railroad for the use of the latter's tracks between Slidell and New Orleans, which will be the route of the lumber products exported.

The G. Gast Manufacturing Co. is the title of a corporation which has filed its charter and which proposes to do a general manufacturing business of ornamental and architectural iron. The charter provides for a capital stock of \$50,000, and will start business when \$20,000 is subscribed. G. Gast, president of the Southern Plating & Wire Co., is president of the new concern. A. R. HOLCOMBE.

## FLORIDA PEBBLE-PHOSPHATE MINING.—I

By JOHN BANNON.

[Written for the Manufacturers' Record.]

It was once the custom to regard Florida as a territory composed largely of sandy and unfertile lands. But it is becoming more generally known and appreciated that Florida not only possesses many fertile and productive sections within her sought borders, but that she furnishes the elements of fertility for soils wherever fertilizer is used throughout the civilized world.

The pebble phosphate-mining industry in Polk county, Florida, has grown to proportions which a few years ago were considered unattainable, notwithstanding the fact that the existence of the deposits was equally well known at that time. Within an area of 30 miles in Polk county there are nine large mining plants, the annual output of which in the aggregate exceeds 500,000 tons. A tenth plant is now in course of construction, and provision has been made by a Chicago packing-house for the installation in the immediate future of another, which, with regard to capacity and general excellence in mechanical equipment and economical innovations, will equal, it is said, if not surpass, the best type of mining plant now in actual operation. Still another Chicago packing-house has secured 600 acres of Polk county land, which has already been prospected, revealing phosphate deposits, with the object of clearing the overburden and mining and preparing the material, through the instrumentality of an up-to-date installation, in the near future.

In Polk county the most extensive deposits of phosphate rock of the pebble variety are found by far exceeding in volume those of any like area in the world.

While it is estimated that the visible supply of phosphate will last about 25 or 30 years, this refers only to land now in course of development. The invisible supply may be said to be, at least for use of present and nearby future generations, inexhaustible, and I have heard experienced mining men assert that so far the product has been but touched on the surface.

The growing importance of the phosphate industry will be more fully appreciated when it is remembered that recent reports from all over the United States and foreign countries are to the effect that the use of fertilizer is being largely increased. Agriculturists are at length realizing that it is a good investment to purchase high-grade fertilizers, whether for use on poor or naturally fertile soil.

Phosphate deposits are found in beds

varying from a few inches in thickness to 25 feet, with a fair average of about nine feet. The phosphate stratum lies between what is called the "overburden," which consists of a sandy clay and earthy conglomerate material and a yellow sticky variety of clay beneath. The physical features of mining operations consist in removing the overburden, so that the phosphate stratum may be laid bare to facilitate removal for the purpose of washing, screening, drying, weighing and loading.

In a well-equipped mining plant these essential and distinctive operations involve the use of much machinery of various types. Included in the operations mentioned is the introduction of enormous volumes of water from the bowels of the earth, and to the extent of 15,000,000 gallons daily, much of which is used for what is termed "hydraulicizing," concerning which I will refer further along in this article. The equipment, broadly speaking, consists of electrical machinery of the most powerful make, electric illuminating outfit, electric trolley or freight railroads, steam plants of great capacity, air-compressing appliances, pumping machinery operated alike by steam and centrifugal power, water-heating and steam-condensing attachments, elevating and conveying machinery of the strongest character yet manufactured, batteries of furnaces for the generation of intense heat essential for drying the phosphate, together with screening and washing machines, revolving cylindrical dryers and the many other indispensable accessories required in the active development and treating of the product of a phosphate mine.

At the commencement of the phosphate-mining industry in Florida, 1891, negroes and mules operating common road scrapers were the agencies employed for the removal of the overburden and the obtaining of the valuable osseous deposits, while the more advanced operators used centrifugal and centripetal pumps and steam shovels. But the modern process of mining and preparation of land pebble phosphate for market has reached such perfection from a mechanical engineering, as well as economical standpoint, that some description of the machinery and number of mechanical contrivances in use in an up-to-date phosphate mine will, I feel sure, prove of special interest to those directly or indirectly connected with the fertilizer industry, whether manufacturer, trader or consumer.

In the first place, the presence of these vast beds of phosphate, and just how they came to be deposited in layer form between subsoil and overburden, are food for those of a reflective turn of mind. The question as to how these deposits originated has never been satisfactorily answered, and the probability that it ever will be is extremely doubtful. Theories abundant in number have been advanced by scientists from time to time as explanatory, but the fact remains we are as innocent of a true knowledge of this interesting and mysterious phase of the industry today as when the deposits were first discovered.

H. E. Memminger, constructing and mining engineer, of Lakeland, Fla., who has had much practical experience in the erection and operation of pebble phosphate plants, has this to say: "The consensus of opinion is that the deposits are the result of a drift which originated from the hard-rock deposits of the counties of Alachua, Marion, Citrus and Hernando, and which are conceded to be in place. The floods and freshets tearing away the loose and smaller particles from these main deposits bore them down southward until reaching the Alafia basin and its tributaries, where, the force being broken, the waters in their passage continued to drop the particles of phosphate, now worn and rounded into the characteristic form of 'pebbles,' which became incorporated with the land adjacent to the river, filling all the lakes, creeks, ponds and depressions with the stratum of from a few inches to many feet in thickness."

I have also heard the singular theory advanced that the phosphate deposits are due to the selection of a location in prehistoric times well north of Polk county by the finny denizens of the ocean as a place of demise. But this theory must be abandoned when it is understood that the phosphate deposits frequently reveal the presence of ossified bones of mammals, as distinct from vertebrate animals which breathe by gills and live in water. Vertebral, rib bones and teeth of fish, which in life formed the nucleus of colossal bodies, are found abundantly in the phosphate deposits. The mixture of ossified matter of land and sea animals alike, in such prodigious quantities as are shown by the Florida deposits, still further deepens the mystery of their origin and transportation, from the original depository location to the present one.

The term "mining" in the usual acceptance of its meaning in its application to phosphate production must be designated a misnomer. Pebble phosphate mining consists in dislodging and removing the overburden and the subsequent securing of the pebble by a system of hydraulicizing and pumping. Hydraulicizing may be described as the utilization of a stream of water forced through nozzles such as are used in placer mines at high pressure and with sufficient momentum as to tear and disintegrate the overburden bank. The latter, through contact with the water, crumbles, and becoming mixed therewith, due to the volume of water reacting from the bank with apparently undiminished energy, rushes along ditches graded downward to a central point, perhaps 200 feet distant, and discharges into a large hole or receptacle crudely formed in the ground. The material is thus furiously drifted by the velocity of the water and banks of oversoil are reduced to nothing in an incredible short space of time. In the central or "sump hole" a 14-inch iron suction pipe is inserted, and as fast as the overburden and water combination rushes in it is pumped out by great dredging pumps and discharged at a point perhaps 1000 or 2000 feet distant. Veritable newly-formed mountains are created by this means, with mine holes or pits from

which the material has been removed of corresponding depth.

There are locations, however, where the nature of the conglomerate overburden will not permit of this form of mining, in which case dredging and steam shoveling must be resorted to.

There is no reason why this excellent and economical method of dislodging and removing vast bodies of oversoil cannot be used to equal advantage in the grading and laying out of new settlements, of city parks or other large undertakings where the cost of removal of hundreds of thousands of tons of dirt is a menace to the corporation treasury. The material to be removed, however, must be of a character susceptible of being reduced, so that it will readily drift in conjunction with the water. Standard giant nozzles are used, furnishing a two-inch stream of water at 100 pounds pressure. It is a fascinating sight to observe the powerful stream of water ripping up and disintegrating the great overburden banks, the downward crash of tons of dirt which, crumbling and assimilating with the rushing water, is instantly taken up and swept on with irresistible force to the great sump hole. The giant nozzle is set on a swivel and is guided by a negro operative. The stream can be played at any point on face of bank momentarily, the usual method being to divert the stream along the bottom, the undermining thus caused precipitating the entire face of the bank.

The processes which follow the removal of the overburden and the securing of the pebble in the preparation of the material for market include washing, screening and drying. The particular kind of plant and machinery generally which is necessary to develop a mine is controlled by the nature of the soil and physical conformation of the surrounding district. The use of barges and floats are found necessary at certain mines. The following briefly covers the main features of mining and preparatory treatment of the pebble phosphate as conducted in the plant of the Prairie Pebble Phosphate Co., Mulberry, erected and put into successful operation by Constructing Engineer Memminger. The drift is discharged into a system of screens and washers, which are either permanently installed on the bank or carried on barges or floats which follow the mining. The pebble, passing from a separator into log washers, thence into rotary screens, is finally loaded on the automatic dump cars and hauled to the drying plant at central installation. The drying is effected by the direct application of heat in rotary dryers, which are in continuous action, the material being constantly fed in at one end and discharged at the other. I was informed that the Prairie Pebble Phosphate Co.'s mine at Mulberry, nine miles from Bartow and 40 miles east of Tampa, was the most recently constructed pebble phosphate plant installation, and that at great pains and expense every known device and mechanical method which gave promise of economy and facility in operation were in use. I decided to make a careful inspection of this plant, and after a nine-mile drive from Bartow with a guide I started out to make my investigations.

I found the equipment in every detail a model of engineering skill, bearing favorable comparison with plans in any other branch of the mining industry. Almost without exception everything possible is conducted on automatic principles, and the highest degree of efficiency and economy is in evidence on every hand. The main features of the series of installations which comprise an up-to-date pebble phosphate mine consist of great boiler capacity, complete and extensive electrical alternating-current plant for the purpose of illumination and distribution of power used in



operating centrifugal pumps, washing, drying, conveying and elevating machinery. The system as a whole includes a number of plants, one each at the mines, which may be a distance of a mile or more, five or six in number and in various directions from the central or main plant, in which latter are included an artesian well water system, pumping equipment, powerhouse, steam plant, drying furnaces, together with the necessary machinery for that department, elevating and conveying machinery for the transportation of the dried and finished pebble to the storehouses, from which, by a well-arranged elevated-bin system, freight cars can be loaded almost instantly by the simple withdrawal of a slide. The bin chutes guide the material into the body of the freight car beneath. The main storehouse is 700 feet long, 60 feet broad and perhaps 100 feet in height. A railroad track, standard gauge, runs clear through the center of the building on the surface, and another runs on each side of the building outside.

After the purifying process, which is carried on at the top of the roofless elevator structure, probably 60 feet in height, the material is shot into great bins wet and dripping. From the bins it descends into the train of dump cars awaiting to be loaded on the tracks beneath. The cars in use are of the Valk & Murdoch automatic and dump make, several hundred of which are in constant use in transit between the mines and central plant.

#### The Baldwin Steel Co.

The MANUFACTURERS' RECORD of March 8 presented a lengthy statement in correspondence from Albert Phenix regarding the plans of the Baldwin Steel Co. for the establishment of a large steel plant at Charleston, W. Va. This plant is to manufacture crucible steel, also all grades of carbon tool and die steel and a special chrome-nickel steel for automobile crankshafts and gears, a steel which has largely been imported. It is now stated that the

## To Connect the Rio Grande and the Mississippi.

By C. S. E. HOLLAND, Chairman Executive Committee Interstate Inland Waterway.

[Written for the Manufacturers' Record.]

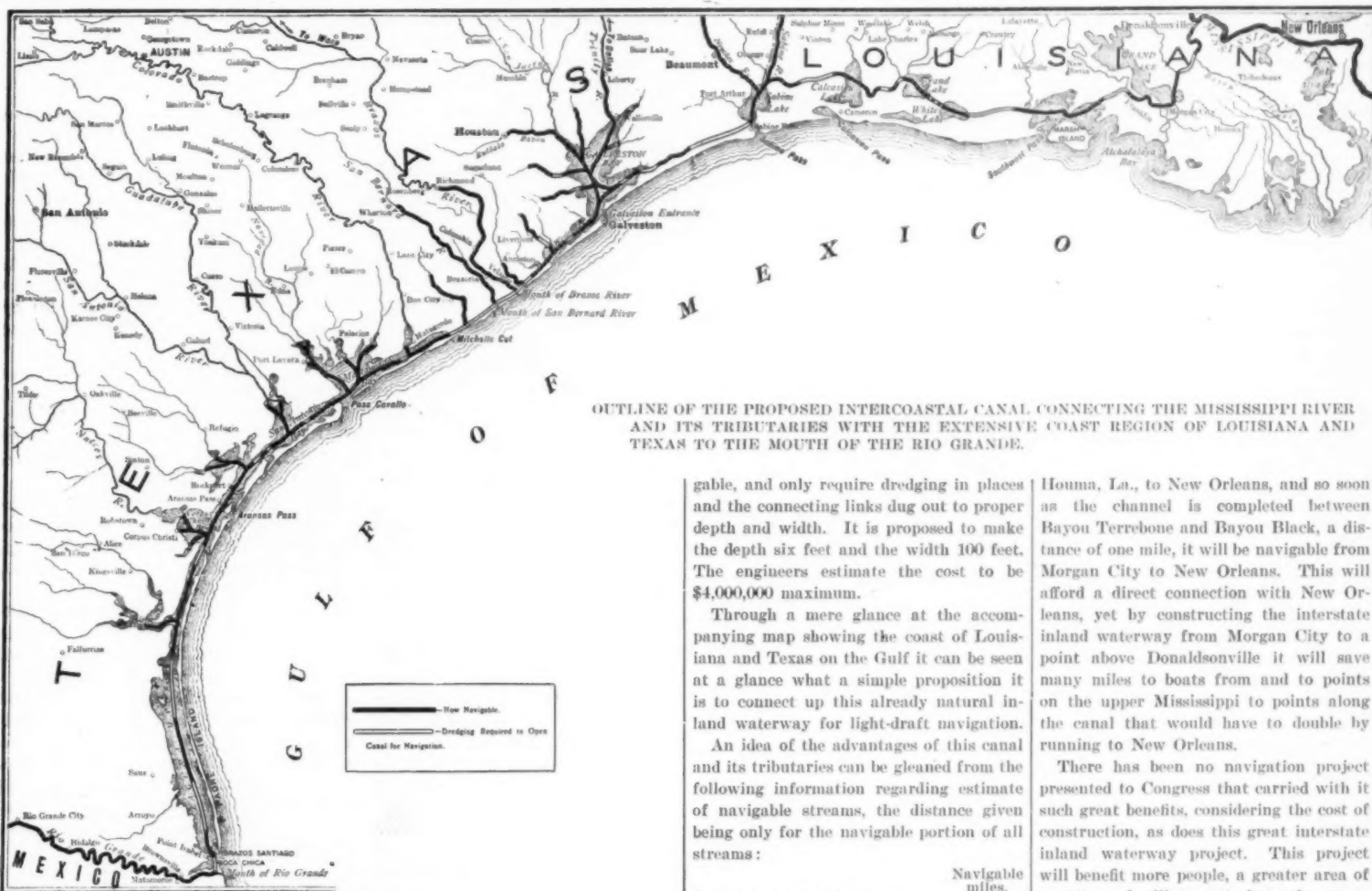
The proposed interstate inland waterway, known for years as the Intercoastal canal, connecting the Mississippi river with the Rio Grande river, covers a distance of about 650 to 700 miles. It is a canal only in the sense of its connecting links, as it is a natural waterway composed of the inland bays, beginning at the mouth of the Rio Grande river and extending east along the Laguna Madre bay, Corpus Christi bay, Aransas bay, San Antonio bay, Matagorda bay, the canal already completed from mouth of Brazos river to Galveston bay, Sabine lake, Sabine river, Calcasieu lake, Grand lake, White lake, Vermillion bay, the upper Atchafalaya bay or Grand lake to Mississippi river.

These bays and lakes are already navigable,

for cultivation of sugar and rice that cannot be used, as transportation facilities are necessary in the raising of these crops. Also thousands of acres of virgin forest will be made accessible, which will cause saw-mills to be constructed.

The hardwoods bounding on the tributaries of this canal will find its first market when the proposed waterway makes it accessible. There are stretches of this canal being navigated now, but will not be navigated to advantage until connected up with the great Mississippi river and its tributaries, which will enable light-draft boats from Pittsburg, St. Louis and other points to go up the Rio Grande river.

This canal will connect at Morgan City with the Barataria and Lafourche canal, which is now being navigated from



Several cars are loaded on each of the three tracks at the same time, and in the event of a rush shipment it is possible, with sufficient stock in bins, to load three trains of box phosphate cars in a few minutes.

The pits or mines are each connected with the central plant by an electric trolley freight system, over the track of which the pebble is conveyed from the mines for the final processes, which include the important operation of drying. The washing and scrubbing of the pebble is effected at the mine plant, the pebble passing from a separator, in which large lumps of clay balls and other bulky material are disposed of, into sets of log washers, where, due to the treatment which produces perfect attrition, the pebble is turned out pure, but wet, as a result of the hydraulic process. Each of the pit or mine plants have complete elevating and purifying equipment, the whole being operated by a powerful electric motor, the current for which is obtained from the power-house at central plant.

Baldwin Steel Co., which has its general offices at 133 Reade street, New York, has completed plans for the plant and is purchasing the machinery to be required. Its plans provide for a main building 120x400 feet in size and a power-house 40x80 feet, about 1000 horse-power to be used, probably electric. The mechanical equipment will include two rolling mills, one 10-inch and one 13-inch, two crucible-steel furnaces and 11 heating and annealing furnaces. When the Charleston plant is completed the company will remove its present equipment at Cold Spring, N. Y., to the new establishment. Mr. C. F. Simmons is in charge of the company's New York offices, and U. C. Brewer will be in charge of the construction work at Charleston.

It is announced that Hon. G. W. Koiner, commissioner of agriculture of Virginia, will sail for Europe May 24 for the purpose of visiting Great Britain, Germany and Scandinavia in the cause of immigration to his State.

gable, and only require dredging in places and the connecting links dug out to proper depth and width. It is proposed to make the depth six feet and the width 100 feet. The engineers estimate the cost to be \$4,000,000 maximum.

Through a mere glance at the accompanying map showing the coast of Louisiana and Texas on the Gulf it can be seen at a glance what a simple proposition it is to connect up this already natural inland waterway for light-draft navigation.

An idea of the advantages of this canal and its tributaries can be gleaned from the following information regarding estimate of navigable streams, the distance given being only for the navigable portion of all streams:

	Navigable miles.
Interstate Inland Waterway.....	675
Rio Grande river.....	400
Basin bay.....	20
Nueces river.....	20
San Antonio river.....	75
Guadalupe river.....	100
Navidad river.....	50
Colorado river.....	150
San Bernard river.....	40
Brazos river.....	200
Buffalo bayou.....	75
San Jacinto river.....	25
Trinity river.....	500
Neches river.....	50
Sabine river.....	100
Calcasieu lake.....	50
Grand lake (west).....	25
Vermillion bay.....	50
Atchafalaya bay.....	75
Grand lake (east).....	50
Total.....	2730

As a matter of fact, many more miles of these rivers and lakes will be made navigable after the completion of this canal, as its construction will make it necessary and reasonable.

The immense tonnage, consisting of lumber, sugar, rice, cotton, corn, alfalfa and other hay, cottonseed-oil-mill supplies and fuel oil, is sufficient to warrant the expenditure of many more times \$4,000,000 in saving of freight charges.

In addition to this, there will be thousands of acres of land made accessible

Houma, La., to New Orleans, and so soon as the channel is completed between Bayou Terrebonne and Bayou Black, a distance of one mile, it will be navigable from Morgan City to New Orleans. This will afford a direct connection with New Orleans, yet by constructing the interstate inland waterway from Morgan City to a point above Donaldsonville it will save many miles to boats from and to points on the upper Mississippi to points along the canal that would have to double by running to New Orleans.

There has been no navigation project presented to Congress that carried with it such great benefits, considering the cost of construction, as does this great interstate inland waterway project. This project will benefit more people, a greater area of country and will cause to be made accessible thousands of miles of navigable streams that now have no outlet; will afford a new market for coal, iron and other raw materials from the upper Ohio; will inaugurate an interchange of commerce that will benefit the entire country many times the amount necessary to be expended in the construction of the waterway.

Great interest in the project is being manifested throughout the States of Louisiana and Texas. A convention was held with 150 delegates at Victoria on August 8, 1905, and another convention is called to meet on May 22, 1906, at Lake Charles, La., which will be an interstate convention, and from present advices there will be from 400 to 500 delegates in attendance, representing the chambers of commerce, boards of trade and business men's associations from all cities, towns and hamlets of Texas and Louisiana.

Prominent speakers will address the convention, among whom will be United States senators, congressmen, governors and State senators and representatives.

Suffice to say that the people are thor-

oughly aroused to the importance of the undertaking, and are determined that the endeavor shall be carried forward to a successful issue as speedily as possible.

Columns could be consumed if I should go into detail, giving statistics and showing, as can be done in a most convincing manner, the feasibility of the project and the many united and single benefits to accrue to all points touched by the canal and its tributaries, to say nothing of the benefits to be reaped by Eastern coal miners, manufacturers, etc.

I have tried in a brief way to comply with your request for an article, and desire to thank the MANUFACTURERS' RECORD for the interest shown in the interstate inland waterway, as in all matters pertaining to the welfare of our country.

Victoria, Texas.

#### Big Enterprises for Richmond.

Among the new enterprises projected at Richmond, Va., during the week were two of such importance that special reference to them is warranted. These two are a foundry and machine works and a plant for the manufacture of turbine water-wheels and other power-transmission machinery. The latter enterprise will be established by a company which James Lee Shelton, offices in the Shafer Building, is organizing, and the construction of suitable buildings will be begun in the near future. No contracts have been awarded for mechanical equipment, and Mr. Shelton is prepared to receive estimates for a complete foundry and machine shop of sufficient capacity to build wheels up to 66 inches in diameter and iron penstocks and flumes for same.

The other plant will be established by the Richmond Foundry & Manufacturing Co., which was organized in 1902 and has been manufacturing small gray-iron castings. A new charter was recently obtained, the capital stock was increased to \$100,000, and it was decided to build a new and large plant. The foundry will be of brick and steel, 80x120 feet, side walls being glazed from end to end and the roof having a glazed monitor. Three cupolas will be installed, with charging platform of steel and concrete, and an industrial railway will carry iron and coke to the cupolas and carry castings from the foundry to cleaning and finishing departments. At one end of the foundry will be a large department to make the sand cores used in forming cavities of the castings. At the other end will be the cleaning department, including a number of revolving mills. Next to this will be the grinding department, with nickel-plating room and storage for castings awaiting final finishing process. A three-story building 80x170 feet will be used for warehousing and shipping. Besides continuing the manufacture of small iron castings, the company will also manufacture stoves, while scales and other articles will be added from time to time. The equipment of the present plant will be removed to the new buildings when they are completed, besides which there will be added new cupolas, blowers, grinders, cleaning mills, industrial railway equipment and machine tools. More than 50 men are now employed, and this number will be trebled in the new establishment. Messrs. Noland & Baskerville prepared the plans and specifications for the plant, and Arthur Scrivenor is engineer for the company. Mr. Scrivenor is also president; R. G. Rennolds, vice-president, and J. Stuart Rennolds, secretary-treasurer.

#### To Develop Union Springs.

It is evident that the members of the Commercial and Industrial Association of Union Springs, Ala., are taking a renewed interest in their organization. They met recently and discussed plans to promote

the general development of their little city and its surrounding country, and decided to make every endeavor to make known Union Springs' advantages to people who are likely to be interested with the possibility of locating as manufacturers, merchants or owners of other business enterprises.

#### Developments at Tellico Plains.

Brief mention was made in the MANUFACTURERS' RECORD last week of extensive industrial developments planned and in progress at Tellico Plains, Tenn., and in its tributary territory. Some further facts have since been obtained. They refer to mining, manufacturing and railroad enterprises. The Tellico River Lumber Co. is undertaking extensive developments. It is composed of Virginia capitalists who some months ago purchased about 50,000 acres of virgin timber lands on either side of the Tellico river, extending for 25 miles southeast of Tellico Plains. A railway has been graded a distance of four miles, tracklaying is now in progress, and it is planned to continue this work in three sections of eight miles each, as required by the demands of the company's mills for timber. A site of 14 acres has been obtained at Tellico Plains for terminal facilities, yards and lumber mills. These latter will include, it is stated, a \$40,000 band-saw mill, a \$30,000 planing mill and other modern mechanical equipment for developing the vast tract of timber land, which is reported as estimated to cut over 400,000,000 feet.

The Tellico Extract Co. has contracted to purchase a minimum of 60 cords of timber every day from the lumber company, using the wood in the manufacture of tannic acid, and its present plant of 90 barrels capacity daily will probably be doubled. This extract company employs over 100 men, and is composed of Ohio capitalists, among whom is E. F. Southard, president.

The Tellico Slate & Iron Co. owns about 20,000 acres of mineral land in Monroe county and is planning to thoroughly develop the property. Its lands are reported as having outcroppings indicating a great tonnage of iron, copper and slate. Current rumors say that C. F. Herford, the company's secretary, is about to lease a large tract of land to the Virginia Iron, Coal & Coke Co. of Bristol, Tenn., this company planning to open mines and probably build mills for manufacturing iron at Tellico Plains.

Mr. Herford also owns lands on which, it is stated, valuable copper deposits have recently been found, and that more than \$100,000 will be expended during the year in developing the property.

President John McLean of the Douglas, Augusta & Gulf Railroad Co. has issued a circular announcing that it succeeds the Wadley & Mt. Vernon Extension and the Ocilla, Pinebloom & Valdosta railroad companies, besides having acquired the Nashville & Sparks Railroad Co. by lease; also that correspondence relating to business with either of these roads should be addressed to the officers of the Douglas, Augusta & Gulf at Douglas, Ga.

Mr. James F. Read, president of the recently incorporated Hot Springs, Ouachita & Mena Railway Co., writes from Fort Smith, Ark., to the MANUFACTURERS' RECORD that the length of the line contemplated at present is about 50 miles, running between Hot Springs and near Black Springs, in Montgomery county, Arkansas. Mr. James B. McDonough is secretary and treasurer.

A new steamboat service between Tampa and St. Petersburg, Fla., is to be started.

## RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

### CUMBERLAND TRACTION.

Electric Railway to Connect Mining Towns in Southwest Virginia.

Mr. W. T. Goodloe, president of the Cumberland Traction Co., writes from Big Stone Gap, Va., to the MANUFACTURERS' RECORD that a charter has been obtained for an electric railway from Big Stone Gap to Norton, Va., 14 miles, with branches to different mines along the route. The officers are W. T. Goodloe, president; J. W. Kelly, vice-president; J. W. Wright, secretary and treasurer; Malcolm Smith, engineer, and R. T. Irvine, attorney, all of Big Stone Gap, Va.; capital \$25,000.

Continuing, Mr. Goodloe writes that Big Stone Gap is a thriving town of about 2500 population, and just outside of the Wise county coal fields. It has a street railway and two railroads. The proposed line will connect with four roads at Appalachia, about three miles from Big Stone Gap, and also with four roads at Norton. The railway will reach about 14 mining operations with a large population. Blackwood is a good mining town on the route, and Norton is also thrifty and in the midst of the coal operations. It has the Louisville & Nashville, the Norfolk & Western, the Interstate Wise Terminal and the Virginia & Kentucky railroads, besides new roads building to that point. Appalachia is on the Louisville & Nashville, the Virginia & Southwestern, the Interstate and the Southern railways, besides having two lines to mines.

The proposed railway will run through the coal fields and along the north fork of Powell's river.

### B. & O. Work at Parkersburg.

The Baltimore & Ohio Railroad Co. informs the MANUFACTURERS' RECORD that it has just been "decided to make extensive improvements at Parkersburg, W. Va., to provide necessary facilities for the largely increased business. The expenditure will amount to about \$150,000, and the work will include the enlargement of the freight yard to more than double its present capacity, the erection of a roundhouse, machine shop and oilhouse and the building of a cinder pit. Bids will soon be asked for this improvement and the work started as soon as the contract is awarded.

"This improvement is mainly required by the abandonment of Belpre, Ohio, as a freight terminal and the making up and handling of all freight trains at Parkersburg. The bridge across the Ohio river has been so strengthened that all trains can be run over it. Heretofore the bridge was so light that eastbound trains had to be set off at Belpre and westbound at Parkersburg and then taken across the bridge in either direction in sections. This work was done by a switching engine hauling three or four cars across at a time. The change by which everything is handled at Parkersburg provides greater convenience and expedites the movement of business. It also means a substantial improvement to Parkersburg that will contribute to its growth and success.

"Mr. D. D. Carothers, chief engineer of the road, is in charge of this work."

### Oklahoma City to Shawnee.

Mr. Douglas B. Crane writes from Oklahoma City to the MANUFACTURERS' RECORD that the Oklahoma City & Shawnee Traction Co. proposes to build a line 40 miles long connecting the two points named in the title. Two routes have been selected, and either may be adopted. The line will run through rolling prairie coun-

try consisting of very rich river-bottom lands. There is a strip of high land about eight miles wide running north and south, which is well adapted to fruit-growing. No date has yet been set for opening bids on construction.

At Oklahoma City, with a population close to 40,000, connection will be made with the Atchison, Topeka & Santa Fe, the Chicago, Rock Island & Pacific, the Missouri, Kansas & Texas and the St. Louis & San Francisco railroads, besides with two projected interurban lines, one to Sulphur Springs, I. T., and the other to Guthrie, O. T. At Shawnee, with a population of about 20,000, connection will be made with the first three steam roads above named and also with an interurban line building to Tecumseh, O. T.

The directors of the company are W. F. Young, president, Oklahoma City; Sherman Collins, secretary and chairman of the executive board, Ithaca, N. Y.; O. P. Workman, treasurer, Oklahoma City; Daniel Ketchum and William H. Crane of Adrian, Mich.; Douglas B. Crane and James B. Kinne, Oklahoma City.

### BIG STEEL-CAR ORDER.

Pennsylvania to Spend \$23,000,000 for Equipment—Other Contracts.

A dispatch from Pittsburg says that the Pennsylvania Railroad system has prepared its car orders for 1907 delivery, and that this will include about 20,000 steel cars, which will cost approximately \$23,000,000. Most of these will be built at Pittsburg. It is further stated that the Pennsylvania has under construction by various car companies 50,000 steel and steel-frame cars.

The Cincinnati, New Orleans & Texas Pacific Railway will, it is reported, award an additional contract for freight cars. It has already ordered 500 box cars, 12 first-class coaches and 6 baggage cars from the American Car & Foundry Co.

An order for 150 box cars and 50 hopper coal cars, all of 60,000 pounds capacity, is reported given by the Vicksburg, Shreveport & Pacific Railway to the American Car & Foundry Co.

The St. Louis & San Francisco Railroad is reported to have let car contracts as follows: 2000 box cars, 500 coal cars and 250 flat cars, all of 80,000 pounds capacity, besides 500 stock cars of 60,000 pounds capacity. All except some furniture cars will have steel underframe. An order for 50 cabooses has also been given to the American Car & Foundry Co., and the Pullman Company has received a contract for 10 chair cars and 6 combination mail and passenger cars.

### Atlanta, Roswell & Cumming.

Mr. Saxon A. Anderson, contractor, Marietta, Ga., writes the MANUFACTURERS' RECORD that \$50,000 have been raised and it is hoped to raise more for the construction of the Atlanta, Roswell & Cumming Electric Railroad & Power Co. As soon as the bonds are sold contract will be let, the bond issue being for \$250,000.

The prospectus of the company says that it proposes to build and operate an electric railroad and power plant to handle passenger and freight traffic, besides mail and express matter, between Roswell, Cobb county, Georgia, via Alpharetta to Cumming, the county-seat of Forsyth county, Georgia, with the ultimate purpose of direct connection with Atlanta, which can be reached by building a 20-mile extension. The line as at present proposed will be only 20 miles long, and will open up a productive agricultural region. Connection will be made with the Southern Railway at Roswell, a town of 2000 population. Alpharetta has about 1000 population, and the population of Forsyth county, of which Cumming is the county-



seat, is about 15,000. It is proposed to furnish electric lighting to the three towns on the line. S. H. Allen of Cumming, Ga., is also interested in the plan.

#### GASOLINE MOTOR CARS.

##### Union Pacific Has Completed No. 7, a Remarkably Strong and Capable Vehicle.

Mr. W. R. McKeen, Jr., superintendent of motive power and machinery, Union Pacific Railroad Co., writes from Omaha, Neb., to the MANUFACTURERS' RECORD saying that Union Pacific gasoline motor car No. 7, recently completed, is of the same general design as motor car No. 2, which was built some time ago, but that the new car "is equipped with side entrance instead of end, these door apertures being worked into the side of the car without any weakening of same by means of patented steel framing, incorporating an uninterrupted depressed side sill. By the slightly-increased thickness of side plates and the additional strength secured in this new framing an enormous increase in the strength of the car is obtained. The roofs of previous motor cars are 15 inches lower

1, the Overland Limited. The motor car gained on No. 1 to such extent that at Fremont, 46 miles from Omaha, the motor car was held on the block six minutes. Owing to a heavy wind and meeting trains from this time on, No. 1's schedule was not maintained; however, the total time of motor car from Omaha to Grand Island, 153.6 miles, was 5 hours and 12 minutes, with delays amounting to 40 minutes on account of orders, meeting trains, etc. The actual running time for the 153.6 miles was 4 hours 32 minutes, or 34 miles per hour. There was no delay whatever on account of the motor car, and the machinery was in almost constant motion from Omaha to Grand Island. On the return trip April 15 the actual running time was 4 hours 10 minutes, or 36.3 miles per hour. From Elkhorn to South Omaha, a distance of 24.3 miles was covered in 36 minutes, or 42 miles per hour. A maximum speed of 53 miles per hour was attained on this trip."

One of the motor cars built by the Union Pacific is in operation between Houston and Galveston, Texas. Acetylene gas is used for lighting these vehicles.

#### HOLSTON RIVER LINE.

##### Virginia & Southwestern Said to Be Back of the New Railroad.

G. W. Callahan of the Callahan Construction Co., Knoxville, Tenn., is reported as saying that the proposed Holston River Railway, for which his company has a contract, is backed by the Virginia & Southwestern Railway, of which Henry K. McHarg is president. Mr. Callahan is also reported as saying that 1000 or more men will be put on the contract, and probably 600 mules will be necessary. Work is already begun.

The line is from Persia, Tenn., on the Rogersville branch of the Southern Railway, six miles from Rogersville, to Yuma, Va., 41 miles. Yuma is in Moccasin Gap, and connection will be made there with a short extension being built by the Virginia & Southwestern. A bridge about 800 feet long will span the Holston river at Miller's Island, and at Arnett's Creek either a tunnel 300 feet long will have to be built or else a large cut will be made. For several miles before Moccasin Gap is reached the road will follow the route of the old Three Cs line.

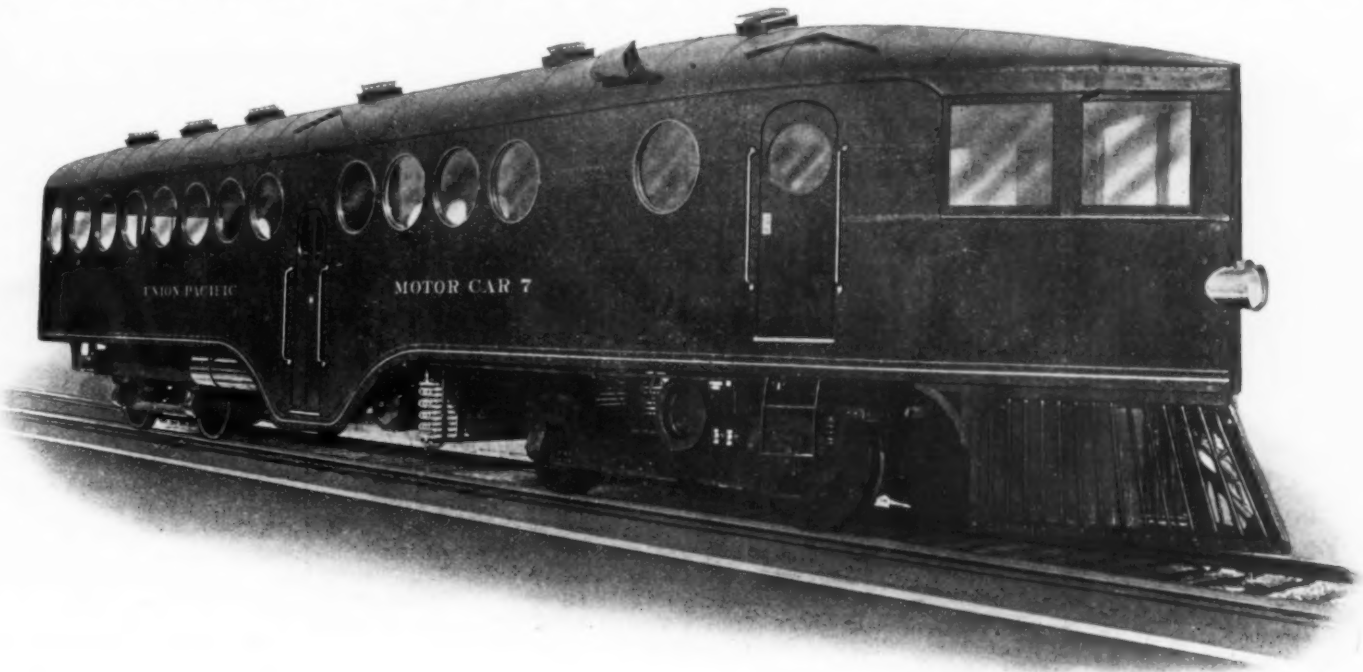
Mexico Railway and the National Lines of Mexico. The plans have been completed, and the bridge will be constructed of stone and steel, with three spans; it will also have space for foot passengers and vehicles, in addition to the railroad tracks. There will be a draw of 60 feet in the center.

#### Savannah to Athens.

Mr. George M. Brinson writes from Stillmore, Ga., that engineers for the Brinson Railway are now locating part of the proposed line between Savannah and Springfield, Ga., about 25 miles, and as soon as this work is completed construction will begin. He cannot say how soon work will be done beyond Springfield towards Athens, labor conditions at present being unfavorable. It is proposed to complete the work in sections, but to proceed steadily with construction.

#### Cannel City to Hillsboro.

The Ohio & Licking Valley Railway Co., which proposes to convert the Licking Valley Railway to standard gauge and to build a line from Cannel City, Morgan



UNION PACIFIC GASOLINE MOTOR CAR.

than an ordinary passenger coach, but the roof of car No. 7 is nine inches lower than the roofs of the other motor cars.

"In car No. 7 the square design of window has been done away with, and air, water and dustproof round window sash has been substituted. This sash is similar to the porthole of a vessel, and keeps out all the elements, which even the double sash of the finest parlor cars is unable to do. This car embraces all the latest developments and improvements in motor-car construction, among which is the cast-steel engine-bed truck-frame combination casting called a 'skirk,' which is a large factor in developing the practical side of the motor car in every-day service. It also has built-up veneered wood seats, with a semi-circular seat at rear, as in other cars, the seating capacity of the car being 75. The interior is finished in English oak. The weight is 58,000 pounds and the length 55 feet. The car is especially designed for climbing grades, and is not geared to as high speed as some of the previous cars.

"After running around the Omaha yards and vicinity for the purpose of limbering up machinery, etc., motor car No. 7 was given its first long-distance trial on April 14 and 15. On April 14 it left Omaha as the second section of train No.

#### The Texas Railway's Plans.

Mr. F. W. Weeks, chairman of the board, Texas Railway Co., writes from San Antonio, Texas, to the MANUFACTURERS' RECORD confirming its statement as to the route of the proposed line. The officers are M. Goggan, president; G. S. McFarland, vice-president; W. F. Rose, secretary; general office, San Antonio, Texas.

Continuing, Mr. Weeks writes: "The portion of the road from Yoakum to Port O'Connor will probably be built first. The grade for that distance, 91 miles, is ready for the rails. It will be known as the first division. The country through which this passes is a cattle country, but arrangements have been made to cut up this land and colonize it and make it a farming country.

"The portion nearest the coast is excellent for truck gardening. A deep-water harbor will be provided at Port O'Connor. The rest of the country through which the road will pass is farming land, and is well settled up. Victoria, Yoakum, La Grange, Seguin, New Braunfels and San Antonio are the principal towns. G. M. Duller is the engineer. It is intended to let contracts for construction on or before June 1, and for equipment on or about that time."

#### Appointments.

The Illinois Central Railroad Co. announces the following appointments:

W. H. Brill, division passenger agent, St. Louis, Mo., vice C. C. McCarty, resigned; R. J. Carmichael, district passenger agent, Chicago, Ill., vice W. H. Brill; J. V. Tedford, city passenger agent, Chicago, Ill., vice R. J. Carmichael; J. O. Linton, city passenger and ticket agent, Omaha, Neb., vice J. V. Tedford; Perry Marr, city passenger and ticket agent, Cincinnati, Ohio, vice J. E. Sullivan, resigned; G. G. Truesdale, traveling passenger agent, Cincinnati, Ohio, vice Perry Marr.

President Frank S. Gannon of the Virginia & Carolina Coast Railroad Co. announces under day of May 1 that Mr. F. E. Dewey having taken leave of absence, the duties of the general manager will be assumed by the president. The following appointments have also been made: Mr. M. W. Maguire, general superintendent; Mr. R. E. L. Bunch, traffic manager.

#### New Bridge Over the Rio Grande.

The proposed bridge across the Rio Grande from Brownsville, Texas, to Matamoras, Mexico, will, it is said, be constructed by the St. Louis, Brownsville &

county, 72 miles, to Hillsboro, Fleming county, Kentucky, on the Cincinnati, Flemingsburg & Ashland Railway, has decided upon its plans, and construction is to begin within two months. A branch will be built from Cannel City via Jackson, Ky., to the Elkhorn Creek coal fields in Letcher county. It is also contemplated to continue the line to Pound Gap and to make connection with the Louisville & Nashville Railway. Connection with the Licking Valley Railway will be made at Salt Lick, Ky.

#### Coast Line to Enlarge Yards.

A press report from Wilmington, N. C., says that the Atlantic Coast Line will increase the capacity of its freight yards there from 600 cars to at least 2000 cars, and that the principal yards will be just outside of the city limits. Work is to begin immediately. A double track will be constructed from the yards in the city to the additional property, and a double-track steel bridge will be built over Smith's creek.

The Italian steamer Procidia cleared from Lambert's Point, Va., last week with a cargo of 1000 tons of Pocahontas and 4200 tons of Eureka coal. The shipments went to Messina, Sicily.

## TEXTILES

### SOUTHERN SPINNERS.

#### Program of the Asheville Meeting of the American Cotton Manufacturers' Association.

Among the papers to be presented at the annual convention, May 16-17, at Asheville, N. C., of the American Cotton Manufacturers' Association are "The Evils to the Trade of the Present System of Government Cotton-Crop Reports," by W. J. Neale, president Southwestern Cotton Buyers' Association, Waco, Texas; "The Future Supply of American Cotton and Better Baling of the Same," by J. A. Taylor, president National Ginners' Association, Wynnewood, I. T.; "Relation of the Cotton Industry to Southern Development," by E. D. Smith, national organizer Southern Cotton Association, Columbia, S. C.; "Proper Accounting Methods," by F. W. Lafrentz, C. P. A., president American Audit Co., New York; "The Credit Problem Viewed from the Standpoint of Actual and Practical Utility," by P. S. Trevor, the Credit Office, New York; "The Metric System in the Cotton Trade," by Samuel S. Dale, *Textile World Record*, Boston, Mass.; "The Metric System in the Textile Industries," by W. W. Crosby, Brighton Mills, Passaic, N. J.; "Co-operation: Its Importance in Fire Prevention," by H. L. Phillips, manager Factory Insurance Association, Hartford, Conn.; "Recent Development in Air Conditioning," by S. W. Cramer, cotton-mill machinery, Charlotte, N. C.; "Efficiency of Electric Drive in Cotton Mills," by Frank B. Perry, General Electric Co., Boston, Mass.; "Immigration and Its Relation to Labor Supply in Textile Mills," by M. V. Richards, land and industrial agent Southern Railway Co., Washington, D. C.; "Electricity: The Power Behind the South," by W. S. Lee, Jr., vice-president Southern Power Co., Charlotte, N. C., and "Cultivation of Cotton in Lower Egypt," by S. H. Carver, Carver Bros., Ltd., Alexandria, Egypt.

President H. M. Miller, Jr., of Charlotte, N. C., is to make his address, and addresses are also expected from Governor Robt. B. Glenn of North Carolina, Mr. T. H. Rennie of the Graniteville Manufacturing Co., Graniteville, S. C.; Mr. Chas. K. Oliver, president of the Consolidated Cotton Duck Co. of Baltimore, and Col. Henry G. Heister, secretary of the New Orleans Cotton Exchange.

#### Southern Mill Improvements.

Many Southern cotton mills are being enlarged and improved, as seen by reference to the textile news which the MANUFACTURERS' RECORD presents each week. Besides the companies which have been mentioned recently as installing new additional spindles, looms and other machinery, besides undertaking improvements of different kinds, it is pertinent to refer to a number which are making or contemplating betterments of a general character. These may be briefly summarized as follows: Kesler Manufacturing Co., Salisbury, N. C., to add 38 looms; Roanoke Mills Co., Roanoke Rapids, N. C., possibly to add spindles and looms; Warren (Md.) Manufacturing Co., preparing plans for a weaverroom, to contain 6000 square feet; Belle Vue Mills Co., No. 1 mill, Burlington, N. C., modernizing plant by replacing old cards with up-to-date cards and installing new napper machine, new upright dry cans, etc.; Fidelity Manufacturing Co., Charlotte, N. C., to install thread-waste picker, reset three boilers and build more tenement-houses; Calvine Manufacturing Co., Charlotte, N. C., changing from steam to electric power; Liberty (S. C.) Cotton Mills, adding cardroom machinery; Long Island (N. C.) Cotton Mills, contracted

for 10 new revolving flat-cards, one lapper and one spinning frame; Trolinwood Manufacturing Co., Haw River, N. C., installing four new carding engines; Cedar Falls (N. C.) Manufacturing Co. expects to overhaul machinery of both mills and add some new equipment; Franklinville (N. C.) Manufacturing Co., adding new spinning frames; Union Cotton Mills, Maiden, N. C., contemplating some improvements; Chatham Manufacturing Co., Elkin, N. C., adding 1000 spindles with twistors; Harden Manufacturing Co., Worth, N. C., building rock dam, installing new cards, and to add looms later; Raleigh (N. C.) Cotton Mills, ordered 8 twistors and 12 universal winders; Langley (S. C.) Manufacturing Co. contemplates adding a complete system of humidifiers; Middleburg Mills, Batesburg, S. C., recently completed extensive improvements; Valley Falls (S. C.) Manufacturing Co., completed installation of steam plant and other machinery; Athens (Ga.) Manufacturing Co. during the past year has installed 90 per cent. of new machinery to replace old equipment, the plant now having 11,280 spindles; Hartsville (S. C.) Cotton Mills, adding new looms; Selma (N. C.) Cotton Mills, probably double its 5280 spindles in about a year; Pine Creek Manufacturing Co., Camden, S. C., building a warehouse and 16 cottages; Worth Manufacturing Co., Worthville, N. C., contemplates new looms; Mollohon Manufacturing Co., Newberry, S. C., installing 64 40-inch dobby looms; Shelby (N. C.) Cotton Mills, six cards and 1040 spindles contemplated; Union Cotton Mills, Lafayette, Ga., ordered 896 spindles and dobbies; Banna Cotton Mill, Goldville, S. C., may add to its 7100 spindles; Tifton (Ga.) Cotton Mills, to add one spinning frame of 224 spindles; Trio Manufacturing Co., Forsyth, Ga., contemplates increasing from 3000 to 10,000 spindles; Ashby Cotton Mill Co., Emporia, Va., contemplates doubling its capacity, 5500 spindles now being operated; Rosemary Manufacturing Co., Roanoke Rapids, N. C., contemplates building addition to contain 5000 spindles and 148 looms, present equipment being 12,000 spindles and 268 looms; Vivian Cotton Mills, Cherryville, N. C., to double plant this year, equipment at present being 1632 spindles; Standard Cotton Mills, Cedartown, Ga., contemplates adding 3000 spindles and preparatory machinery next fall; Lawrenceville (Ga.) Manufacturing Co. contemplates adding 5000 spindles; Pearl Cotton Mills, Beverly, Ga., installing 2000 additional spindles; Roberdel Manufacturing Co., Rockingham, N. C., adding 2500 spindles and 120 looms; Hermitage Cotton Mills, Camden, S. C., add machinery and overhaul boilers; Asheville (N. C.) Cotton Mills, replacing old dyehouse with new one; Gwyn Harper Manufacturing Co., Patterson, N. C., installing 1000 additional spindles; Central Cotton Mills, Sylacauga, Ala., adding 3136 spindles; Pendleton (S. C.) Cotton Mills contemplates adding 10,000 spindles to its 3136 spindles during the ensuing year; Anchor Duck Mills, Rome, Ga., doubling its 7000 spindles and 74 looms; Morewebb Cotton Mills, Dallas, N. C., may change to electric drive; Globe Manufacturing Co., Gaffney, S. C., will install 1000 more spindles; Lincoln Cotton Mills, Southside, N. C., considering construction of dam and wheelhouse and installation of electric power for its plant and for the Laboratory Cotton Mills; Winona (Miss.) Cotton Mills adding 4000 spindles and 100 looms; Trenton (Tenn.) Cotton Mills installed two new boilers at a cost of \$2000; Henry River Manufacturing Co., Hildebran, N. C., to add 3000 spindles; Providence Cotton Mills, Maiden, N. C., to add 700 spindles; Arkansas Cotton Mill Co., Dardanelle, Ark., to add new machinery and

looms; Monroe (N. C.) Cotton Mills adding 150 looms to equipment of 8320 spindles; Denison (Texas) Cotton Mill Co. adding 15 cards and 140 duck looms; Fall Mills (Tenn.) Manufacturing Co. contracted for new steel overshot water-wheel, and expects to add elevator system and a new gin; German-American Company, Spray, N. C., contemplating an increase of 12,000 spindles during the next six months; Woodstock Cotton Mills, Anniston, Ala., contemplating small extension to accommodate new looms; Weatherford (Texas) Cotton Mills adding 1200 spindles.

#### The Vardry Cotton Mills.

One of the new companies reported last week was the Vardry Cotton Mills, with capital stock of \$75,000, its location being Greenville, S. C. This company expects to effect organization soon, and probably L. M. McBee will be president and treasurer, and J. W. Roberts, superintendent. Its buildings are about ready for the machinery, water-power has been developed, wheels are installed, and it is likely that a small supplementary engine will be added. The building has a capacity of 5000 spindles, which are to be purchased, together with a complete dyeing plant. The company will manufacture yarns, numbers 20 to 30, two-ply warps, black and white and gray mixes for the weaving trade, and about 75 persons will be employed.

In addition to the foregoing facts, the MANUFACTURERS' RECORD is informed by telegraph that the stockholders have elected the following directors: Messrs. L. W. Parker, J. H. Morgan, J. W. Cagle, Alexander McBee, J. W. Roberts and T. Q. Donaldson and Mrs. L. M. Beattie. These directors elected L. M. McBee, president and treasurer, and W. E. Beattie, vice-president. The company's product will be high-grade colored yarns for the weaving trade from raw cotton.

#### To Add 8000 Spindles.

The Highland Park Manufacturing Co. of Rock Hill, S. C., will add 8000 spindles during the summer, and contract for the new machinery will be awarded to the Whitin Machine Works of Whitinsville, Mass. From \$30,000 to \$40,000 will be expended, but no new construction will be required. These new spindles will be in operation by August 15. There are 8192 spindles and 936 looms in the present Rock Hill plant, the company having two other mills at Charlotte, N. C. The corporation has recently amended its charter, authorizing an increase of preferred stock from \$296,200 to \$400,000 at 6 per cent. The capital stock of \$700,000, of which \$300,000 is common, remains unchanged.

#### Newnan Cotton Mills.

The MANUFACTURERS' RECORD has referred several times to the big addition which the Newnan Cotton Mills of Newnan, Ga., has decided to build. It stated that the company had decided to increase its capital stock from \$300,000 to \$800,000 for the erection of an additional mill to contain 25,000 spindles, together with complementary machinery, and contract for erecting the new buildings required was awarded to Messrs. T. C. Thompson & Bro. of Birmingham, Ala. This enlargement will be proceeded with and the new spinning mill will contain, according to the company's latest decision, 33,000 spindles and complement.

#### Pickens Cotton Mills.

The MANUFACTURERS' RECORD of last week reported the proposed organization of the Pickens Cotton Mills of Pickens, S. C., the capital stock to be \$250,000. It can now be stated that it is probable the company will soon effect permanent organization, as subscriptions to the capital are

being readily obtained. It is proposed to manufacture 36-inch 48x52 four-yard goods, and an equipment of 15,000 spindles, with accompanying apparatus, is to be installed for this purpose. W. M. Haggood, president of the Glenwood Cotton Mills, Easley, S. C., will be president and treasurer of the new company.

#### The Francis Cotton Mills.

The MANUFACTURERS' RECORD of March 8 reported the incorporation of the Francis Cotton Mills of Biscoe, N. C., the new company having a capital stock of \$200,000. Officers have been elected, and they have decided to establish a plant of 7500 ring spindles, which will be operated by steam power. The product will be yarns only, 14, 16, 20, warps and skeins, single and two-ply. The officers are J. R. Page, president; A. W. E. Caple, treasurer, and W. T. Hurley, superintendent. Construction of buildings is expected to begin this week.

#### The Rhode Island Enlargement.

Last week the MANUFACTURERS' RECORD mentioned the decision of the Rhode Island Company to add 4000 spindles and 150 broad looms to its plant at Spray, N. C. It can now be stated that the company has awarded contract for the spindles and necessary carding machinery to the Saco & Pettee Machine Works of Newton Upper Falls, Mass., and for the looms to the Crompton & Knowles Loom Works of Worcester, Mass. Messrs. Lockwood, Greene & Co. of Providence, R. I., are the engineers in charge of this enlargement.

#### Morristown Woolen Mills.

Last week the new companies incorporated included the Morristown Woolen Mills of Morristown, Tenn., with a capital stock of \$100,000. The company has since organized with A. B. Kesterson, president; R. H. Wright, vice-president; G. A. Russell, secretary; J. B. McCord, treasurer, and will establish a woolen knitting mill. It will begin operations with 12 knitting machines, a three-set mill and other equipment, manufacturing its own yarns, the finished product to be yarns, linsey, blankets and flannel.

#### The Bradford Knitting Mills.

Reference was made last week to the incorporation of the Bradford Knitting Mills of Statesville, N. C., with a capital stock of \$100,000. The company's stockholders have since elected directors as follows: Messrs. Eugene Morrison, C. S. Tomlin, J. A. Bradford, H. C. Cowles, J. F. Paul, D. M. Ausley and N. B. Mills. Messrs. Morrison, Tomlin and Bradford are, respectively, president, vice-president and secretary-treasurer. They will now give consideration to details of the plant.

#### The Chockoyette Mills.

The MANUFACTURERS' RECORD of February 15 reported the incorporation of the Chockoyette Mills of Weldon, N. C., and stated the new company proposed building a plant for the manufacture of silks and satin linings. The new company is now installing its equipment of machinery, which includes 50 looms and accompanying apparatus. The officers are M. W. Ransom, president; W. T. Shaw, treasurer, and H. D. Hewett, agent and superintendent. Capital stock is \$50,000.

#### The White-Williamson Company.

The MANUFACTURERS' RECORD of last week mentioned the incorporation of the White-Williamson Company with a capital stock of \$200,000. This new company succeeds Messrs. White, Williamson & Co., operating a cotton mill of 5000 spindles and 200 looms at Saxapahaw, N. C. It expects to improve the mill by replacing



22 old cards with modern machines, to add intermediates, drawings, fine speeders and spoolers, and 2500 spindles.

#### The Roanoke Knitting Mills.

Recently the MANUFACTURERS' RECORD referred to the incorporation of the Roanoke Knitting Mills of Roanoke, Va., with E. W. Tinsley as president and E. F. O'Brien, secretary-treasurer. The company will continue the plant which Messrs. Daniel Robb and Chas. Michael previously operated under the same title. It has a capital stock of \$25,000, and the mill is equipped with 150 machines.

#### Hamer Cotton Mill.

The Hamer Cotton Mills of Hamer, S. C., will add 5000 spindles. The company has building completed and ready for the machinery, the structure being of brick, one story high, 80x300 feet. With the spindles there will be installed heating and sprinkling systems, shafting, boilers, pulleys, etc., and the present engine will be compounded. The company's present equipment is 7168 spindles.

#### Perkins Hosiery Mills.

The Perkins Hosiery Mills of Columbus, Ga., contemplates increasing its spinning capacity about 30 per cent. in the near future and adding lines of knit goods other than 84-needle hosiery, which is now its sole product. This company is now operating 4000 spindles, 169 knitting machines, pressing and finishing department, etc. It is a new enterprise which began operations a few months ago.

#### Improvements at Enoree, S. C.

The Enoree Manufacturing Co. of Enoree, S. C., is now operating a total of 36,000 spindles and 960 looms. It has recently completed improvements, which included adding 5280 spindles and the installation of 440 automatic looms in place of old weaving machines which have been discarded. The Geo. W. Stafford Company of Readville, Mass., furnished the new looms.

#### The Williamston Mills Addition.

Announcement is made that the Williamston Mills of Williamston, S. C., will install during the summer 3584 spindles and 100 looms additional. This will increase the mills' equipment to 29,568 spindles and 700 looms, all of which will be driven by electricity obtained from the Belton (S. C.) Power Co.'s water-power-electric plant near Belton.

#### Will Enlarge Its Mill.

Stockholders of the Clover Manufacturing Co. of Clover, S. C., have decided to add 5000 spinning spindles and the necessary preparatory machinery. This will involve the expenditure of probably from \$75,000 to \$85,000, and the construction work is expected to be undertaken soon. The company at present operates 15,000 spindles.

#### Big Enlargement Proposed.

The Lydia Cotton Mills of Clinton, S. C., will during the next year increase its mill to 30,000 spindles and 600 looms. This will involve the installation of 10,000 spindles and 150 looms, as the company now has 20,000 spindles and 450 looms. More definite announcement of details will doubtless appear later.

#### The Dover Yarn Mills.

The equipment of the Dover Yarn Mills at Pineville, N. C., has recently been considerably increased, and now totals 14,000 spindles and 380 looms. These improvements included the installation of 5500 spindles and preparatory machinery to match. Probably more than \$60,000 was expended for the betterments.

#### The Vance Cotton Mill.

Some time ago the MANUFACTURERS' RECORD stated that the Vance Cotton Mill Co. of Chattanooga, Tenn., intended improving its plant of 1400 spindles. These betterments are now in progress, and include the installation of 4000 spindles, with accompanying pickers, cards, drawing, flyers, etc.

#### Big Addition in View.

A big addition to the present plant of the Brookside Mills at Knoxville, Tenn., is expected to be undertaken some time in the future. It will involve the installation of 40,000 spindles and 1000 looms. The company is at present operating 52,000 ring spindles, 8500 twister spindles and 1000 looms.

#### Big Addition Contemplated.

An addition of 8000 spindles to present equipment is contemplated by the Highland Park Manufacturing Co. of Rock Hill, S. C. This enlargement will probably be undertaken this summer, and will require the expenditure of from \$80,000 to \$100,000. The company now has 8192 spindles and 836 looms.

#### Will Double Capacity.

The Saxe Gotha Mills of Irene, S. C., intends to double the capacity of its spinning-room. This enlargement will be undertaken so that the company's present spindles, which are now operating day and night, will operate during the day only. There are at present 5000 spindles and 252 looms in position.

#### To Double Its Mill.

The Bloomfield Manufacturing Co. of Statesville, N. C., will double the capacity of its mill during the present summer. This plant is now operating 4700 spindles and accompanying equipment on the manufacture of yarns, and probably further details regarding its enlargement will soon be known.

#### The Winona Cotton Mills.

The Winona Cotton Mills of Winona, Miss., is adding 4000 spindles and 100 looms. The company recently awarded contracts for this new machinery, and expects to complete the installations in the near future. Its present equipment is 6000 spindles and 200 looms.

#### The Brookford Mills Enlargement.

The Brookford Mills of Brookford, N. C., has decided to add 6000 spindles and 300 looms to its present plant. No new construction will be necessary, and contract for the new machinery has been awarded. This equipment is now being received and placed in position.

#### A Proposed Mill.

The erection of a 5000-spindle cotton mill is contemplated by G. W. Ford of Louisburg, N. C. Mr. Ford has not arranged any details, and is inviting correspondence relative to the purchase of the steam-power plant and textile machinery needed.

#### Will Double His Mill.

Mr. H. C. Townsend of Anderson, S. C., expects to double his cotton mill, which is credited with 2280 ring spindles, using electricity for power. He will be in the market for new cotton machinery, electric motors, shafting, belting, etc.

#### New Hosiery Mill.

A company will be organized with capital stock of \$100,000 for the purpose of building a hosiery mill at Hickory, N. C. It is projected by W. P. Cline and associates, who now want to correspond regarding the purchase of machinery.

#### Rope Machinery Wanted.

The Cherokee Water Mills of Rome, Ga., is considering the erection of a cotton rope and twine mill, and is ready to correspond regarding the purchase of the necessary machinery. Address S. D. Cornwell, secretary.

#### Installing Additional Machinery.

The Gainesville Cotton Mills of Gainesville, Ga., is installing some new machinery, including an addition of 2000 spindles and 76 looms. This company is at present operating 35,000 spindles and 1000 looms.

#### Will Add 4000 Spindles.

The Capitola Manufacturing Co. of Marshall, N. C., announces its decision to add 4000 spindles in September. This company has 5000 spindles in operation, the product being hosiery yarns.

#### Wants Cotton-Rope Machinery.

Mr. W. O. Kenan of Selma, Ala., wants to correspond with manufacturers of cotton-rope and twine machinery, and it may be presumed that he contemplates establishing a mill.

#### Mt. Holly Improvements.

The Mt. Holly Mills of Mt. Holly, N. C., expects to add from 1000 to 1500 spindles, and other machinery in proportion. The company now has 2000 spindles in operation.

#### Textile Notes.

La Grange (Ga.) Mills is building new picker-room and installing new opener and cleaner process.

Linn Mills Co. of Landis, N. C., has recently added 384 spindles, and now has 5168 in position.

Fountain Cotton Mills of Tarboro, N. C., has recently added 1224 spindles, and now has a total equipment of 6528 spindles.

Hutcheson Manufacturing Co., Banning, Ga., has added a knitting mill equipped with 40 machines to its 7500-spindle yarn plant.

The Victoria Cotton Mills of Rock Hill, S. C., will at once install 2440 new spindles. It is now operating 9216 spindles and 300 looms.

The Golden Belt Manufacturing Co. of Durham, N. C., will add 2080 spindles about June 1; present equipment is 24,416 spindles and 640 looms.

It is stated that the Russell Manufacturing Co. of Alexander City, Ala., is shipping its goods, light-weight cotton underwear, to Pennsylvania and the New England States.

The Roanoke (Va.) Cotton Mill Co. contemplates doubling its capacity. It is now adding a modern dyehouse and finishing plant for cord and twine, and has 6032 spindles in operation.

Mr. William H. Ashley of Hackettstown, N. J., is reported as to organize a company, probably to be called the Kingston Spinning Co., to establish a silk-spinning mill at Kingston, N. C.

Monarch Cotton Mills Co., Dallas, N. C., is progressing with the construction of its mill, previously reported, and will begin operations with 4000 spindles in position. The other 1000 spindles will probably be added within 12 months.

The Durham (N. C.) Hosiery Mills will add 3136 ring spindles to its present equipment of 1776 ring spindles and 11,248 mule spindles. This company manufactures yarns for market, besides supplying its 800 knitting machines on the production of hosiery.

## COTTONSEED

### COTTONSEED CRUSHERS.

#### Program of the Interstate Association's Annual Meeting at Atlanta.

Among the important papers to be presented at the annual meeting May 15, 16 and 17 at Atlanta, Ga., of the Interstate Cottonseed Crushers' Association will be one by Prof. J. H. Connell of Dallas, Texas, on cottonseed meal as human food, and one by Dr. R. J. Redding of the Georgia Experiment Station on cottonseed meal versus cottonseed as fertilizer. The annual address of President J. C. Hamilton of Baton Rouge, La., will have wide interest, as well as reports by Mr. Robert Gibson, Dallas, Texas, the secretary and treasurer of the association; by Mr. I. Jalonik of Dallas, Texas, on mutual fire insurance; by Mr. F. H. Dailey of Paris, Texas, on rules, and by Mr. L. A. Ransom of Atlanta on the bureau of publicity. An attractive feature of the second day's meeting will be reports by individual members on anything for the good of the industry. Addresses of welcome will be made by Governor J. M. Terrell for the State, by Mayor James G. Woodward for the city, and President Sam B. Jones of the Chamber of Commerce for the business men of Atlanta, and replies will be made by President Hamilton, Mr. F. H. Bailey of Paris, Texas, and Mr. Ernest Lamar of Selma, Ala. Arrangements for the meeting are in the hands of the executive committee of the Interstate Association, and of Messrs. J. A. Aycock, R. G. Riley, J. H. Fulford, J. L. Hand, W. W. Abbott and E. W. Yow of the Georgia Cottonseed Crushers' Association.

#### Cotton Oil in Butter.

Mr. Jo. W. Allison, Ennis, Texas, has published an interesting memorandum booklet replete with valuable information regarding cottonseed products. Mr. Allison has contributed much toward educating the public to the merits of cottonseed products and their more extended use. A leading manufacturer himself, identified with all phases of the business for a generation, he is an authority which the trade everywhere recognizes. Mr. Allison shows how quality of butter can be improved and increased by the introduction of cotton oil. He says:

"Heat a quantity of good deodorized cooking (cottonseed) oil to about blood heat, and just before beginning to churn add to the milk, using about half teacupful to each gallon of milk, and proceed as usual. Good cooking oil can be bought from any progressive grocer at about 50 cents per gallon or less, which is about 6½ cents per pound. A three-gallon churning will take about a pound of oil. It will hasten the coming of the butter, assist in its better collection, improve the quality of both it and the buttermilk, and being returned as butter, will give, with the better collection of the butter fat, an increased yield of a pound to a pound and a-half of butter and a profit equal to the difference between the selling price of the butter and the cost price of the oil."

The Interior Texas Compress Men's Association met in a two-day session at Dallas last week and elected the following officers: Messrs. J. A. Hooper of Austin, president; C. J. Sorrells of Dallas, vice-president, and Mr. Steele, secretary, treasurer and general manager of the organization.

The Business Men's League of Vicksburg, Miss., has chosen Mr. William H. Patton, former secretary of the St. Paul (Minn.) Board of Trade, as its secretary, and will enter upon a vigorous campaign for the development of the city.

## LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

### For Forest Reserves.

At Washington last week a hearing was given by the House committee on agriculture to a large delegation advocating the proposition to create forest reserves in the White and Appalachian mountains. Among the speakers before the committee were Governor McLane of New Hampshire, who spoke particularly with reference to the reserve in the White mountains, which is to embrace an area of 1250 square miles, and Governor Glenn of North Carolina, who emphasized the need of an Appalachian reserve, stating that many Southern industries depend on the conservation of the powers of the South. The Appalachian reserve will be 17,500 square miles, and the establishment of both will involve an appropriation of \$3,000,000. Other speakers were Representative Patterson of North Carolina, Director Stewart of the West Virginia agricultural experiment station, Major Smith of South Carolina, representing the Southern cotton manufacturers; Theophilus Parsons of Massachusetts, speaking for the New England manufacturers; C. S. Goodrich of Connecticut, who spoke of the effect of the White mountain reserve on the streams of New England; Harvey N. Shepard of Massachusetts, H. A. Baker of Providence, R. I.; Col. H. O. Kent and George H. Moses of New Hampshire, Rev. Dr. Edward Everett Hale, chaplain of the Senate, and Samuel L. Patterson, commissioner of agriculture of North Carolina.

### Georgia Lumber Enterprise.

Among the new Georgia lumber enterprises of the past week is a plan for the development of 7000 acres of land in Hall county. It is stated that 5000 acres of this tract is heavily timbered in white oak, poplar and yellow pine, and that mills will be built with a daily capacity of from 20,000 to 25,000 feet. Messrs. J. H. Hunt, H. H. Dean and Quillian Bros. of Gainesville, Ga., have purchased the tract and will undertake the development work. They have stated the purchase price was about \$100,000, and that they are now ready to receive bids for the saw-mill machinery and for the lumber, also for two traction engines. Their further statements are that the property will cut a total of from 25,000,000 to 40,000,000 feet; that the white-oak trees are very large and will make the very best quality of quarter-sawed oak, the pine trees very tall and large and will furnish extra length and sizes.

### Pine in Sabine County.

Mr. John D. Goodrich, editor of the Hemphill (Texas) *Leader*, referring to the valuation of pine lands in Sabine county, Texas, is reported as saying:

"There is in Sabine county about \$15,000,000 of undeveloped pine timbered lands. According to the assessed valuations of these lands, they average \$6.35 per acre. A great quantity of this timber has recently been sold. Among these was a deal just consummated involving \$400,000. This sale was made by T. L. Temple of Texarkana, but the particulars were not given out. The increased valuations of these lands during the past three years has been over 300 per cent., and at the next meeting of the board of equalization of Sabine county the assessments on pine lands are to be increased from \$6.35 to at least \$12.60 per acre, which will double the valuations for the present year."

## Alcohol from Sawdust.

A dispatch from Jackson, Miss., under date of April 26 says:

"Lumber manufacturers in Mississippi predict that the day is not far distant when every ounce of sawdust at the various mills in this State will be utilized in the manufacture of wood alcohol, and that lumbermen will place a value on sawdust second only to that of the main product of their plants. A plant is now being erected at Hattiesburg for the purpose of transforming sawdust into alcohol, and a series of practical tests have demonstrated that there is a large margin of profit in the enterprise. The concern is known as the Lignum Products Co., and was chartered several months ago with a capital stock of \$250,000. The necessary mechanical devices have been perfected and patented, and the industry will be in operation within a few weeks."

### Southern Turpentine Operators.

The Southern Turpentine Operators' Association, having for its purpose the control of labor and the adoption of a scale of wages to be paid in the district of Florida, Alabama and Mississippi, was organized at Mobile, Ala., last week by about 50 operators from the three States mentioned. The following officers were elected: W. T. McGowan, president; L. D. Pringle, vice-president; W. B. Patterson, secretary and treasurer.

### Wanted for Cotton Mill.

Manufacturers of lumber will be interested to know that the Rhode Island Company of Spray, N. C., is in the market for 12x16-inch timbers and 3-inch flooring and sheathing.

### Lumber Notes.

The Cypress Manufacturers' Association will hold its annual meeting at New Orleans, La., May 16.

The Manufacturers, Builders and Employers' Association of Nashville, Tenn., has effected permanent organization by the election of the following officers: President, J. W. Patrick; vice-president, S. F. Sawrie; secretary, W. M. McDonald, and treasurer, Wade Kirkpatrick.

Secretary Lewis Doster of the Hardwood Manufacturers' Association of the United States attended a meeting of hardwood manufacturers at New Orleans last week at which arrangements were made for a general meeting on May 17 for the purpose of perfecting an organization of the manufacturers of the State.

The East Tennessee and Southwest Virginia Lumbermen's Exchange has been organized with Messrs. E. D. Galloway of Johnson City, Tenn., president; B. B. Burns, vice-president, and George W. Peter, secretary and treasurer. The purpose of the organization is to conserve the interests of the manufacturers and wholesale men.

### Looking for Industries.

[Special Cor. Manufacturers' Record.]  
Cynthiana, Ky., April 28.

We have a Commercial Club of 200 members who are in earnest and mean to do something for our city. Our three banks have more than \$1,000,000 on deposit, and our people have awakened to the fact that we should have some manufactures here to give employment to capital as well as to labor. Should you know of any deserving enterprise that needs help and is seeking a location, we should like to hear from it. We would appreciate anything you can do for us in putting us in communication with such enterprises. They can address W. T. Lafferty, secretary, or myself. WM. ADDAMS, President Cynthiana Commercial Club.

## MINING

### Railroad Sells Coal Interests.

Announcement is made that the Baltimore Syndicate, just organized, and managed by Messrs. Clarence W. Watson, Jere H. Wheelwright and H. Crawford Black, all of Baltimore, Md., has purchased the entire holdings of the Baltimore & Ohio Railroad Co. in the Consolidation Coal Co., main offices in the Continental Trust Building, this city, and its allied properties. The deal is said to involve about \$5,000,000, and carries with it the control of the Cumberland & Pennsylvania Railroad, which is owned by the Consolidation Coal Co., and has about 33 miles of main track from Cumberland, Md., to Piedmont, W. Va., and about 60 miles of sidings and spurs touching the various mines along the line. By the consummation of this transaction the purchasers control 200,000 acres of coal lands in Maryland, Pennsylvania and West Virginia, and handle an annual production of about 10,000,000 tons of bituminous and 1,000,000 tons of anthracite coal. The properties conveyed include the Consolidation Coal Co., with \$10,250,000 capital; the Cumberland & Pennsylvania Railroad, with \$1,500,000; the Fairmont Coal Co., \$12,000,000; Somerset Coal Co., \$4,000,000; Clarksburg Fuel Co., \$3,000,000; Southern Coal & Transportation Co., \$500,000; Fairmont & Pittsburg Fuel Co., \$2,250,000; Metropolitan Coal Co. of Boston, \$1,500,000; Northwestern Fuel Co. of St. Paul, \$3,000,000, making a combined capitalization of \$38,000,000.

Mr. Watson, who is the president of the Consolidation Coal Co. and its allied companies, in addition to Messrs. Black and Wheelwright, will also have associated with him in the deal Messrs. Van Lear Black of Baltimore, former Governor A. B. Fleming, S. L. Watson, J. E. Watson, Walton Miller and L. S. Malone of West Virginia.

### Lead-Mining Operations.

The Rye Valley Lead Mines Co. was recently reported as reorganizing with a capital stock of \$50,000 for the purpose of continuing the operation of lead mines in Rye Valley, near Sugar Grove, Va. With reference to this enterprise the MANUFACTURERS' RECORD is informed that the Chamberlin Mineral Co., with offices at 606 F street N. W., Washington, D. C., has been organized with Messrs. H. H. Green, president and general manager, and Dr. A. B. Chamberlin, secretary-treasurer. The company will install a 100-ton concentrating plant to cost from \$12,000 to \$15,000, and desires prices on a 150-horsepower boiler, rock crusher, two sets of rolls, 10-horse-power dynamo for lighting, 60-horse-power engine, etc.

### To Develop Coal Property.

The Red Raven Ash Coal Co. of Richlands, Va., has been incorporated with a capital stock of \$40,000 to operate coal mines on the Norfolk & Western Railway near Raven, Va. It is announced that the company will equip its plant with the latest improved electric mining machinery, expecting to develop an output of from 800 to 1200 tons of coal per day within the next 12 months. The company's officers are Messrs. J. N. Harmon of Tazewell, Va., president; J. N. Harmon, Jr., Tazewell, secretary and treasurer, and M. R. McCorkle of Richlands, manager in charge.

### Kaolin and Aluminum.

The Southern Kaolin & Aluminum Co. of Blaney, S. C., has been incorporated with a capital stock of \$100,000 to operate a kaolin mining plant at Rolling's Mill, near Blaney. It is said to be the intention of the company to confine its operations

for the present to mining and shipping kaolin and manufacturing caustic soda, expecting at an early date to equip a plant for the manufacture of aluminum. Officers of the company are Messrs. E. O. DePass, president and treasurer; William S. Leib of Philadelphia, vice-president, and Theodore Loder of Philadelphia, secretary in charge.

### Manganese-Ore Mining.

The American Manganese Ore Co., with offices at 332 West Main street, Louisville, Ky., has been incorporated with a capital stock of \$100,000 by R. L. O'Bryan and associates for the purpose of mining and selling ore, etc. Details as to the erection of necessary buildings and the installation of equipment have not been decided as yet. Mr. James M. Persons of Morristown, Tenn., is the architect and engineer retainer.

### Wants Prices on Coal.

The MANUFACTURERS' RECORD is advised that the Reed Lumber & Coal Co. of Reed, O. T., wants prices on coal.

### In the South.

[Memphis Commercial-Appeal.]

The MANUFACTURERS' RECORD, always the friend of the South, speaks as follows:

"Capital is pouring into the South nowadays in an unhesitating stream for all her enterprises, but in no way is it being invested with more confidence than for the building of new railroads. For such work alone the expenditure of \$100,000,000 in the immediate future is in sight. The demand for transportation facilities is tremendous in all the Southern States to put their natural wealth of coal, iron, lumber and other riches of the earth in touch with the markets of the world. Consumption of every one of these products of the mine and the forest has grown to dimensions which not long ago were undreamed of, but the progress of humanity and all its varied enterprises and industries is now at such a pace that hardly any figures are too stupendous for belief among predictions concerning what the future has in store."

Every word of this is true. There is not a railroad that touches the South that is not planning, aye, and constructing, more and still more trackage to provide transportation for the abundance that is now easily perceivable in every part of this section of our country. Nor is there indication anywhere of a halt in the projection and construction of railroads in the South. On the contrary, the future of transportation here is assured, for there is so much of nature's bounty yet remaining to be developed that for many years to come the cry must be onward and still onward.

Nor are the railroad interests the only ones pouring capital into the South. It is coming in every shape conceivable to commerce, thereby rendering landed interests triply valuable.

From a state of poverty the South has grown rich with a dangerous suddenness. The get-rich-quick fever is upon us. It is a contagious and deadly disease, and it behooves the men of the South—the sound men of the South—to meditate it carefully and wisely, else we are apt to sacrifice fundamental principle to a reckless spirit of speculation. With its finger ever upon the pulse of this section the same journal just quoted detects this spirit of unrest and cautions the country as follows:

"Never was the responsibility so great as today upon the press, the pulpit, the teachers, the business leaders of the South to realize the momentous problems which we face, and in this realization to strive to build up the rising generation that they may be worthy sons and daughters of the men and women who made glorious the record of the old South."



## THE COTTON CONFERENCE AT WASHINGTON.

[Special Correspondence Manufacturers' Record.]

Washington, May 2.

Quite historic and notable has been the international conference of cotton-spinners with the cotton-growers of the South, held at the New Willard Hotel in Washington yesterday and today. The six English representatives of the Lancashire cotton spinners, who have been going over the South for the past month, were in attendance, and of the hundred or so delegates which comprised the meeting there were representatives of the National Association of Manufacturers, Farmers' Educational and Co-operative Union of America, National Ginners' Association, Southern Cotton Association, New England Cotton Manufacturers' Association, American Cotton Manufacturers' Association, National Fire Protection Association and the International Federation of Cotton Spinners and Manufacturers' Associations.

The meeting is of historic interest, in that it is the first time the growers and the spinners of cotton have met together, and it is notable on account of the general good feeling that prevailed throughout the four sessions held. The spinners and the growers got to know each other and their needs and necessities as they never have known them before, and it was strongly apparent that better relations and a mutual desire to be more helpful to each other were established.

As to concrete results, it would seem that the growers will be stimulated to new efforts in preparing a slightly bale for market, that improved methods in handling cotton will be adopted, that systems of warehouses will be greatly encouraged and efforts made to minimize the evils of speculation by dealings between the growers, through their warehousing agencies, and the spinners direct. It was the view of the cotton-growers that as much had been accomplished as could have been expected at a first meeting of this kind, and that the understanding reached will furnish the basis for experimentation along definite lines.

### Growers and Spinners.

The first day's session opened breezily with a clash of opinions between the cotton-growers and the spinners on the proposition that the spinners ought to be able to furnish the planters with an approximate estimate of the number of bales that would be required for the needs of manufacturers during the current year. It was definitely declared that the South had reached a new plane, and that, instead of being forced to sell cotton at any price that might be offered, the South would hold its cotton until it was offered a price that would give a reasonable profit on the cost of production.

The spinners, on the other hand, declared that trade conditions—a possible earthquake in New York or London or a famine in India or Japan—would so vitally affect the demand for goods that no one could foresee what the requirements might be. One of the English visitors illustrated the point by stating that in meeting trade demands a difference of two counts, which is the slightest change possible in weaving, would make a difference of 500,000 bales in a total crop of 10,000,000.

On taking the chair President J. R. MacColl referred to the magnitude and importance of the cotton industry. As one-fourth of the people of England are dependent on cotton, it was no wonder the English spinners had wanted to investigate conditions here. In England alone there had been an increase of 6,500,000 spindles in a year, and with this enormous expansion in the business there were important problems confronting the spinners.

The stability of prices was one important consideration. Spinners do not want to see prices so low that they will be unprofitable for the growers, but at the same time they want to see economies introduced, so that cotton prices may be reduced without taking away a fair profit to the grower.

Another problem is the evils of speculation, and it was noted that some way might be devised of at least curbing speculation, so that it might be less harmful to all the interests concerned.

The handling of cotton was another problem, and as it was generally recognized that there is room for improvement in ginning and baling, it was hoped that some light might be thrown on these subjects by the discussions that would ensue.

Government reports on the cotton crop was another subject for consideration. There were differing views on this subject, some being in favor of abolishing the reports altogether. It was hoped that a system of government reports might be secured that would be accurate and helpful.

The program for the opening day was "cotton production—methods of cultivation, cost of production, possibilities of acreage and future yield, the world's consumption and needs." This was put down for the morning session, and for the afternoon session the topic was "the handling of cotton—ginning, baling, tare, moisture, transportation."

Congressman J. E. Ellerbe of South Carolina was called on to open the discussion on cotton-growing. He declared that while there had been improved conditions in farming in general, he knew of no real improvement in the growing of cotton. The same methods were in use now as when he was a boy. With all the cotton planters that have been invented, the best he knew of was the same one in use a generation ago, such as his father had brought home when he was a boy. In chopping cotton no machine has displaced "the man with the hoe," and there is no cultivation that is better than the old one. It is the same old hoe, the same old plow and the same old mule.

Congressman L. F. Livingston of Georgia, called on next, said there need be no surprise if some reluctance were shown in telling all the facts. When the manufacturers showed their hands the planters might be expected to show theirs. He said there had been some improvement made in methods of production, but none in labor. The negro had been educated away from the farm, and the whites were going into the factories, so that a great problem as to labor was presented. Experiments in cultivation had not gone far enough to give definite conclusions. It wasn't yet known if there was a first-class cotton fertilizer. We are forced to use such simple implements as our labor can use, but we haven't got a cotton chopper, and never will have, and we haven't got a cotton picker, and never will have. Nature has made the cotton lock so that no machine can pick it clean.

It may be true that the labor of the South has been trained in a rut, but to the criticism that the South should raise all its own supplies it can be said that should the South raise its own horses, mules, meat and other supplies, making cotton merely a surplus crop, it would be impossible, with the present labor supply, to produce more than 7,500,000 or 8,000,000 bales of cotton per annum. The South has been more liberal in giving its cotton than have the growers of any other product, cotton having been put on the market as soon as picked. In the last two years there had been a change, however,

and the growers have been holding back their cotton. This they will continue to do. They are embarrassed by a Wall-Street clique, who buy a few hundred thousand bales of "dogtail" cotton and attempt to break and control the market, and we must legislate against Wall Street in our various State legislatures. If the spinners will co-operate with the growers fairly and squarely they will have no difficulty in stimulating them to a larger production.

Mr. E. D. Smith of Columbia, S. C., declared the only reason for organization for a reduction of acreage is that the South finds there is more money in a small crop than in a large one. He was glad to have the English spinners present to discuss these questions. "Let us get down to business. Let the spinners tell us the amount of cotton they need, and when, and the growers can figure the amount of cost, can fix a fair remunerative price and can divide the profits. If we don't get a fair price we are going to put our cotton in Southern warehouses, finance with Southern money and turn a Southern key on it and hold the crop till a fair price is offered for the crop. We will sign a contract, the Farmers' Union and the Southern Cotton-Growers' Association, to deliver so much cotton at a certain price at any time of the year, and we don't propose that a horde of cotton gamblers shall come in between the growers and the spinners and fatten on both of them."

Mr. Campbell Russell of Indian Territory declared the only way to raise cheap cotton was for the farmer to put his wife and children in the patch. Higher wages wouldn't improve the labor situation, for the more money a negro is paid the less he works. Land has increased in price fully 50 per cent., and there is no way to figure out a cheap bale of cotton unless the family does the work.

Dr. H. P. Hudson of Tennessee said that 70 per cent. of the cotton is produced by white labor now. What is wanted and demanded is that the farmer shall get a price for his cotton that will warrant the farmer's boy in staying on the farm and enable the girls to go to school. He declared it need not be expected that there will be any more cheap cotton, for the South is determined to demand that the price be maintained at a remunerative figure.

Mr. Smith, South Carolina, said he wanted to hear from the manufacturers as to whether there could be an increased price in goods to meet an increased price in cotton.

After it had been stated that the South is one of the biggest consumers of cloth goods, and that when impoverished by low cotton prices the South was in no position to buy goods, and after a paper had been read on the part the boll-weevil plays in the reduced cotton production, Mr. Charles H. Fish of Dover, N. H., said the attitude of the growers seemed to be that all the manufacturers had to do was to ask a little more for goods, so that they could give a little more for cotton. This he declared to be a mistake, as the price of finished goods was governed by conditions about which manufacturers had generally little to say. As a rule, the manufacturer sells his goods after he has bought his cotton. In the past 15 or 20 years prices of goods had been steadily forced down, while at the same time there had been great changes in the demand for goods, the trade now requiring a much better and higher finished product than heretofore. It seemed that the grower would have to get the price of cotton down to the lowest price at which it could be profitably produced, and then the manufacturer must pay that price and the consumer must meet that price or buy wool or one of the many substitutes for cotton. As to labor, the manufacturers were worse off than the growers. They were short everywhere, from a little

bit to 33 per cent. The uncertainty of price causes more trouble than anything else. As to the approximate price the spinner could afford to pay, he might be able to calculate that price for himself, but that would apply only to those located as he was, making the same goods and selling in the same market.

Answering questions directed at him from numerous quarters, Mr. Fish declared he had no suggestions as to how stable prices might be maintained, and while he thought such a result might be arrived at in time, he believed it would take more than one season to accomplish that result.

Answering the queries that had been repeated on several hands, Mr. J. R. Montgomery of Windsor Locks, Conn., declared: "If you have an organization strong enough to fix a price and maintain it, we will guarantee that the spinners of the world will adjust their prices to it."

Mr. Henry P. Greg, one of the visiting Lancashire spinners, being called on by the president, declared he was not able to look at these questions in the same light as had some of the other speakers. There were enormous difficulties in settling the question of what the price shall be. He added: "If the South says 'you can't have our cotton except at a certain price,' we might say 'we won't have it then.' That is to say, your cotton is useless without a market, as much as our mills are useless without cotton. This must be looked at as an economic question. In speaking of the cost of cotton cultivation, are you speaking of the cost in the Carolinas, the Delta or in Texas? It must be confessed that the cost varies not only all over the cotton belt, but even on adjoining plantations. By fixing a price you are going against economic laws by stifling competition. In Lancashire competition is far keener among ourselves than with any other spinners in the world. I would regret any attempts to destroy that competition, which has compelled me to greatly reduce the cost of production and has reduced the price of the product to consumers. I believe it is impossible for any body of spinners, speculators or growers to fix the price of cotton beyond a limited extent. A great deal has been said against the speculator, and I haven't a good word for him, but I believe a much greater damage has been done by the speculations of planters and spinners than by the operations of the professional speculators."

Mr. Harvie Jordan: "The spinners should tell us frankly what the world's requirements for cotton will be."

Mr. H. W. MacAlister: "It is impossible to say exactly, but in general it can be said that the spinners can use all the cotton that can be produced. With increased production increased uses will be found. The Southern States cannot fix the price of cotton, which depends on economic laws. You in the South are producing cotton in the most expensive possible manner. You are going to find means for reducing the cost of production and get a profit at that lower cost."

Mr. S. A. Knight, Providence, R. I., said the well-known laws of supply and demand apply to every article of merchandise. He believed people who labor should receive a remuneration that will enable them to educate their children and enjoy the blessings God intended that human beings should enjoy. He believed the spinners should get together, equalizing conditions as to hours of labor, market prices, etc., and should harmonize their differences.

Mr. Jordan: "Can the spinners give us any idea of what the world's consumption of American cotton will be for 1906?"

Mr. Greg: "We spinners would like to know the same thing."

Mr. Smith: "One of our English vis-

itors says he doesn't know and another says they can spin all we can raise. I would like to inquire will the spinners of the world co-operate with the South in maintaining a remunerative price? The conditions that have existed in the South were without a parallel in the world. Cotton was our sole currency. Raising cotton was not a question of choice, it was a necessity. How do we measure a profit? We poured everything into the cotton crop—education, the future of our families, everything that we possessed. We had to produce that which the world was willing to take, and at a price that was fixed before ever a seed went into the ground. We existed, while the rest of the world reveled in the wealth that we produced. Now, thank God, times have changed. We have paid off our debts, even though the cost was great, and it meant a sacrifice of education, comforts and almost life itself. Now we are independent, and we mean to be paid for this royal crop of ours such a price as will enable us to educate our children and enjoy some of the comforts of life."

Mr. Jordan: "I will change my question to the spinners, and see if I can get an answer in another form. I would like to know what is the world's spinning capacity?"

Mr. MacAlister: "That is a changing figure. At present I am using in my factory 100 bales of cotton a week. Last year it was 100. I have no means of telling whether it will be more than 60 in the year to come."

Mr. Montgomery: "There is much insistence of the question as to how much cotton will be required. Who knows whether there will be a San Francisco disaster in New York or London or Paris; whether times are to be good or bad, or what the coming crops will be? This is wholly a question of supply and demand."

Mr. Jordan: "Don't you think the laws of supply and demand are violated when 12 months' supply of cotton is marketed in three or four months' time?"

Mr. Montgomery's admission that that might be true ended the colloquy.

Mr. Harvie Jordan, president of the Southern Cotton-Growers' Association and one of the vice-presidents of the Washington conference, presided over the afternoon session, and on taking the gavel delivered an extended address, in which he emphasized the desires of the cotton-growers that such trade relations be established between growers and spinners as will regulate the cotton supply, meet the legitimate demand and eliminate the speculator.

The afternoon session was taken up with a discussion of ginning and baling, the conclusion of which was the adoption of a motion to appoint a committee of one from each of the organizations represented, to report at the session Wednesday on the best forms of ginning, baling and packing.

Mr. MacAlister suggested that the English-made baling machine, the one the much-praised Egyptian bale is made from, might be imported at from \$1500 to \$2000, and as for gins Mr. W. J. Orr, another of the English representatives, declared the Fuller gin, found by the Englishmen on their Southern trip, was so great an improvement over the saw gin that every one of the party could easily distinguish between the product of these gins by simply pulling the sample cotton.

#### A Basis of Agreement.

The second day's session opened with Vice-President R. M. Miller of Charlotte, N. C., in the chair, who announced the topic of the morning to be "the marketing of cotton—warehousing, the stability of prices and the relations between the grower and the manufacturer." Mr. A. E. Calvin, president of the Farmers' Union, with headquarters at Dallas,

Texas, came first on the program with a paper on the relations between the grower and the manufacturer. Mr. Calvin pledged the support of the union to all efforts to bring the grower and manufacturer into closer touch, so that the evil effects of speculation might be eliminated to the greatest possible extent. If some method might be devised for preventing violent fluctuations there would be no difficulty in supplying the world with all the cotton that might be required.

Mr. Campbell Russell of Indian Territory said the loss and damage to cotton by exposure was sufficient to put up warehouses. The farmers are now preparing to establish warehouses to save this loss, and also giving stability to prices. The Farmers' Union of Oklahoma and Indian Territories had directly commissioned him as their representative to confer with the spinners with the object of bringing about closer relations between the farmers and the spinners.

Mr. H. W. MacAlister asked that some suggestions be given as to how these plans are to be carried out. The Englishmen are missionaries in this respect, and want to be shown. They don't see how the middleman is to be dispensed with.

Mr. Russell said his idea was that there might be a conference between the grower and the spinner and a reasonable price fixed. If this could not be done, the farmers would confer among themselves and fix a price.

F. W. Davis of Texas said there was no expectation that spinners should break up relations that now exist until assured that the growers are able to supply their place. Would the spinner rather deal with them or with the middlemen, in the old way?

Without at that time committing himself, Mr. MacAlister replied that the Lancashire spinners were very much pleased to hear that the Southern planters are going to put their cotton in better shape to show, and that the talk of warehouses was heard so universally.

W. S. Miller of Texas, representing the Farmers' Educational and Co-operative Union of America, said the farmers were determined to build warehouses and keep the cotton in good condition, and would fix a price that they could afford to sell it at. He felt that it was a mistake to have asked the spinners how much cotton they would take. He had concluded the way to do was for the farmers to raise as much cotton as could be sold at a profitable figure. The farmers were learning to raise foodstuffs, so as to be in position to raise such an amount of cotton as the market requires. It is also proposed to eliminate country damage by the building of warehouses. It was a part of the plan of the association to hold a planter responsible for the condition of cotton sold through the association.

Further discussion by C. B. Emory, E. B. Smith and others developed the widespread determination of the cotton-grower to build warehouses and eliminate country damage to the greatest possible extent. As to how the spinners and growers might get together, Mr. Smith suggested that a string of warehouses may be established throughout the South, with strongly financed State organizations, whose agents might take their samples to the spinners in England and sell direct on a guarantee backed by all the resources of the warehouse company.

Mr. J. R. MacColl declared the spinners of America rejoiced in the prosperity of the Southern farmer and hoped that it might long continue. To the cotton-growers' question whether the spinners would buy from them direct, we could say that if the farmers' organizations were able to offer cotton at a satisfactory price the spinners would be glad to deal with them.

It did not appear, however, how this would eliminate the speculator. If the farmers' organization should sell cotton at 10 cents a pound and New York speculators were to run the price up to 15 cents, would the farmer sell at the low price?

Numerous assurances were given that on a contract basis the farmers would make deliveries at that price, no matter what the market price.

Mr. MacColl pointed out that all contracts could not expire at the same time, but that in any event he failed to see how the speculator would be eliminated by this plan.

Mr. A. A. Brown of North Carolina declared it would be necessary to raise a surplus crop and keep in warehouses enough cotton to control the market. This would require that the spinners and growers be both interested financially in the warehouses so that their interests would be mutual, and that they might share the profits in the elimination of the middlemen. It was regarded as a matter of so great magnitude and importance to both interests that it seemed to the speaker a permanent organization was desirable. Accordingly, he moved the appointment of a committee of one from each organization present to formulate plans for a permanent organization and to name a time and place for the next meeting. Mr. Henry P. Greg believed it premature to effect a permanent organization at this time, but the motion prevailed.

Mr. Charles H. Fish of New Hampshire declared the spinners would be glad to deal with growers if they shall establish the proposed warehouse system, when Mr. P. F. Parker of Alabama said he would like a resolution to that effect, so that something tangible might be shown by him to the people he represented.

Mr. Harvie Jordan thought the spinners had very fully expressed themselves. They say that if the growers will construct warehouses, properly financed, and put expert cotton handlers in charge, they will deal with them. There seems to be but one thing for the Southern people to do—to go to work and build warehouses, store the cotton, get rid of country damage and have some tangible business proposition to offer. It devolved on the growers to provide better facilities for handling cotton, and the spinners then would come to them. If they solve the problem of handling, as they have the problem of production, they can at all times deal with the cotton consumers of the country.

Congressman Livingston of Georgia said the spinners were evidently anxious for better conditions, but they could not be expected to take hold of something now in the air. "We are just beginning to talk warehouses. When we have 10,000 bales of clean cotton, free from sand and country damage, in a warehouse in Montgomery or some other cotton center, then we will have something to offer and can ask them to come to us and see if they do not desire to deal with us."

The only reference made during the meeting to the published intention of the spinners to buy land in the South and raise their own cotton was in the course of a speech made by Mr. Clark of Mississippi, when with good-humored raillery he urged them to go to Mississippi and buy some of the 25,000,000 acres of land not in cultivation there and show the Southern people how cotton should be raised.

Mr. S. S. Dale, editor of the *Textile World Record* of Boston, who attended the congress of the International Federation at Manchester, England, last year, and who was largely instrumental in bringing about the visit of the Lancashire spinners to America, spoke of the large aggregation of spinners from all parts of the Continent of Europe, but said the meeting was incomplete in that no Ameri-

can cotton-growers were present. In the creation of the world the Southern States in America were made the great cotton-growing section of the world. In a lengthy and most interesting paper read by Mr. Dale he pointed out that the cry for cheap cotton came only from the spinners of Europe, who were concerned about the trade of India, where the people bought only the cheapest, coarsest fabrics, and he denied that it was any advantage to have cheap cotton. Manufacturers will find their best customers among the rich and the cultured, who can afford to pay for the finest fabrics, and high prices for cotton means comforts for the Southern farmers and ability to buy better products. It would be an outrage to drag the Southern people to the level of the East Indian. It was not only justice, but it was good business to see that the Southern planter received a good remuneration for his cotton.

#### Ginning and Baling.

Immediately on meeting for the afternoon session, with Mr. H. W. MacAlister in the chair, the report of the committee on best forms of ginning, baling and packing was submitted and adopted. The committee recommended that all bales be made of a standard dimension; that light-weight new burlap be used for bagging, or if conditions justify, that cotton canvas be used; that 10 ties be used on all bales, with the Egyptian style of buckle preferred; that all cotton be bought and sold net weight; that a committee be appointed whose duty it shall be to have cotton baled as above, and to submit the same for practical tests to consumers, and that the committee be empowered to investigate and report on the various new methods of ginning and baling generally, report to be made to the next session of this conference.

The topic for discussion was "statistics and speculation—census bureau reports, agricultural department reports, uniform weight of bales, foreign statistics, speculation." As many of these topics had been previously discussed at much length, there was not a strict allegiance to the program. Much discussion was devoted, however, to crop reports, which were variously attacked and defended, the conclusion of the matter being the adoption of a resolution calling for the appointment of a committee of one from each organization to confer with the Secretary of Agriculture as to what changes and improvements might be made in the methods of collecting data and making condition reports.

After much discussion a motion was adopted that it was the sense of the conference that the statistical cotton year should be changed to August 1 to August 1, instead of September 1 to September 1, as at present.

On speculation the conference adopted a resolution to the effect that speculation in cotton futures is alike disastrous to growers and consumers, and the members will use their best efforts to abolish the practice.

The committee on permanent organization reported that the members did not consider that they were clothed with sufficient authority, so they recommended that members report back to their organization the great knowledge and benefit that is hoped for from this convention and submit for their consideration the question of such further meetings or action as may be advisable.

Felicitations were interchanged between the growers and the spinners, it being the expressed opinion that much good must come from the meeting of English and American spinners with the cotton-growers of the South, and Mr. Jordan hoped that another meeting might be held soon, and this time in the old mother country beyond the sea.



**Some Sidelights.**

Because this Washington meeting was the first occasion on which cotton-growers and the manufacturers of cotton have come together in public conference, the significance of the meeting and its possibilities for the development of an interesting series of discussions were easily foreseen by those who had familiarized themselves with the views of the different elements. It was stated by President Harvie Jordan of the Southern Cotton Association that the three chief aims of the Washington Conference were to further plans for the better ginning of cotton, for an improved system of baling, and for the elimination, through warehousing, of the wide fluctuations in cotton prices during a single season because of the rushing of the crop to market in the earlier months of the cotton year. It has been felt that in many ways there could be effected an improvement in conditions through the co-operation of the growers and the manufacturers, and while it was realized that there might be a tendency to greatly extend the range of the discussions, it was declared that every discussion would be welcomed. "We will be glad to steer clear of subjects on which there is bound to be a radical disagreement or a rupture," declared one of the cotton-growers' officials to me before the meeting had been called to order, "but we of the South will be entirely ready to uphold our side of the case, whatever trend the discussions may take."

An indication of possible subjects of controversy was furnished in some of the papers read at the meeting of the Cotton Manufacturers' Association at Boston last week and in some of the sentiments voiced at the banquet following the Boston meeting. In papers read there had been exhaustive efforts made to demonstrate that cotton can be profitably raised for very much less than 10 cents a pound, and as a check against high prices it has been strongly urged by President MacColl that cotton spinners combine together for the purpose of buying land in the cotton belt and producing their own raw material—a proposition declared by him to be as rational and economically desirable as for steelmakers to own their ore fields or harvesters work their sources of supplies of iron, wood and twine.

The hearty endorsement of this proposition by Lancashire spinners who spoke at the banquet gave as much of a clue to the conclusions the English visitors have reached as anything they have permitted themselves to say as to the results of their recent trip throughout the South. Said Mr. Henry P. Greg of Manchester:

"I was enormously impressed with the fertility of Texas. That one State can raise all the cotton the world needs. I would urge New England spinners to raise their own cotton. It would be a splendid thing if New England spinners should purchase, say, 10,000 acres and experiment with cotton-growing. It ought to be possible to raise an average of a bale to the acre. By improving the seed and having under control the ginning and baling you would be able to get better results and could show the planters of the South the most desirable way of ginning and baling. You could buy 10,000 acres of unimproved land for \$75,000. The greatest difficulty would be in finding a manager, but New England has met many other difficulties and overcome them, and no doubt could overcome this obstacle as well."

Mr. W. J. Orr, also of the Lancashire district, declared his conclusions to be that cotton could be profitably grown for less than 10 cents a pound, and he argued that a price lower than those prevailing in recent years would be better all around. Significant on account of the source was his declaration that only in the United States

can cotton be grown on a cheap basis. "It thus became of great importance that the United States should supply the world with cotton at the cheapest possible price," said he. A few cents a pound advance in cotton prices increased the cost of cotton goods very materially, which means a hardship to the cotton consumers of India altogether disproportional to the temporary advantages gained by the cotton-growers of America, he declared. When cotton cloth goes to 26 cents a pound to consumers in India, as it recently did, it is impossible, he said, for them to buy enough to supply their needs. This hardship is reflected on the English spinners, who are obliged to curtail production and to cease their purchases of the cotton planters' product. Thus, he declared, it will work an advantage all around for cotton prices to be maintained at an uninflated level, for the spinners can take the crop freely and can operate steadily, because they can find a market for their goods.

Mr. H. W. MacAlister, chairman of the commission of visiting Lancashire spinners, declared that in the South the New England spinners have ripe ground in which to exercise their ideas regarding improved methods of cultivating and handling cotton. He declared he had long been impressed with the great advantages of America. In 1884 he had visited this country, and had reported on returning to England that the capacity of America in cotton-raising was nearer 70,000,000 bales than 7,000,000 bales. He had been much impressed with the efforts of this government to educate the people as to farming operations, determining what seeds are best adapted to certain localities and for certain purposes, the character of different soils, etc., and he felt very jealous over the advantages the American planter enjoys. In England there isn't even a commissioner of agriculture yet, and the farmers are left to their own devices, while in the United States agents are sent among the farmers to instruct them as to what crops to plant and how to build up their soils.

The remarks of all these gentlemen throw illuminating sidelights on the opinions entertained by the spinners themselves as to the outcome of the recently-renewed efforts that have been made to establish the cotton-growing industry in South Africa.

At the close of the Boston banquet a speech was made by a Southern cotton spinner which took direct issue with the sentiments of all the visitors.

"When you talk about the hardship of compelling the people of India to pay an increased price for cotton cloth or go without clothing, and urge low-priced cotton on our Southern farmers as a remedy, I would like you to look on the other side of the picture," said Mr. T. H. Rennie of Graniteville, S. C. "Think of the women and children who are working on little cotton patches all over the South, scantily clad, and by the hardest of labor striving to raise a crop that will bring means for clothes and for comforts. When you hammer down the price of cotton to a point where these people not only make no profit, but actually lose money, as has been the case in years not long gone by, you deprive them of the fruits of their industry and bring misery and suffering besides. Instead of trying to see how low the price of cotton may be put, let us rather adjust ourselves to circumstances that have today made the South more widely and universally prosperous than she has ever been before and that have filled that land with well-fed, well-clothed and comfortable people."

**The International Federation.**

On the closing day of the Cotton Manufacturers' Convention at Boston last week Mr. H. W. MacAlister, chairman of the

commission of visiting Lancashire spinners, urged the association to send delegates to the meeting of the International Federation of Cotton Spinners, which begins at Bremen June 25. The association having been nationalized by a change of name from "New England" to "National," Mr. MacAlister urged that a step further be taken and that the association be internationalized. In explaining the plans, purposes and scope of the International Federation Mr. MacAlister said:

"The object of the International Federation is principally to deal with questions which affect the trade from a world-wide standpoint. For instance, in the year 1903-1904, when the great speculative troubles were rampant, and when, as I heard one of your speakers remark today, you New England spinners so severely suffered owing to that cause, we in Lancashire suffered equally. I may say, to give you my own experience, that in six months of that one year my own concern, although it is on a very strong financial basis—that is to say, that it stands at a very low cost per spindle—in six months we lost 10 per cent. of our capital. That will show you how extensively we suffered in Lancashire. That, I am glad to say, has been recently recouped by the very good trade of which we are all enjoying the benefits."

"According to the preliminary program of the Third International Congress, to be held in Bremen in June, papers are to be read upon 'The Rules of Cotton Exchanges' and upon the question of 'Moisture in Cotton.' The Lancashire Cotton Investigating Commission is down to give an account of its travels. The delegates are to be entertained at a banquet by the Senate of Bremen. June 26 a paper is to be read on 'The Means at Spinners' Disposal for Obtaining Adequate Cotton Supply on a More Permanent Basis.' The Bremen Cotton Exchange is to be inspected and the delegates will be entertained at a banquet by the Bremen Cotton Exchange and Chamber of Commerce. On Wednesday, the 27th, there will be a paper on 'Cotton Statistics' and another on 'Cotton-Growing.' Representatives from England, France, Germany, Portugal and Spain are to be present. The delegates will be entertained at lunch by the Spinners' Association of Germany. In the afternoon the delegates will proceed by train to Bremerhaven, where they will board an Atlantic liner which has been most generously placed at the disposal of the delegates by the North German Lloyd Steamship Co., and will sail to Kiel for the purpose of witnessing the regatta. The steamer will return on June 29, and delegates may return by train if they prefer. While on the steamer the delegates will be the guests of the North German Lloyd Steamship Co."

"There are many things which bear upon the question of the more economical dealing with cotton in buying and selling, not only on your account, but on account of the English spinners, which I hope—I am rather sanguine, in fact—that the Congress to be held in June next will take up, and I am hoping that the results which may be deduced from it will be of benefit to the whole cotton world."

At the Boston meeting no action whatever was taken on the question of sending representatives to the Bremen congress. One authority said the reason of the failure was that membership in the International Federation would entail an annual tax of \$2500 in dues. Whether any further action on the matter will be taken remains to be seen. **ALBERT PHENIS.**

**Chemical Companies Consolidate.**

A transaction of much interest has been consummated in this city whereby the properties of the Kalion Chemical Co. and the Ammonia Company, both of Philadel-

phia, Pa., and the Baltimore Chrome Works of Baltimore have been acquired by the Henry Bower Chemical Manufacturing Co., recently incorporated in Pennsylvania. The new company is said to have a paid-up common capital stock of \$2,000,000, a first preferred redeemable 6 per cent. stock of \$500,000, a second preferred redeemable 6 per cent. stock of \$150,000, and has issued 6 per cent. 30-year redeemable gold coupon mortgage bonds to the amount of \$750,000. Mr. George R. Bower, who is the president of the company, is reported as saying that the consolidation of the properties is to add to the simplicity, directness and economy of the operation of the three plants.

**COTTON-CROP PROSPECTS.****Additional Letters on the Outlook from Southern Bankers.**

Letters from Southern bankers additional to those which have been published in the past month bearing upon the prospects of the coming cotton crop follow:

I. N. Ury, vice-president United States Loan & Trust Co., Muskogee, I. T.:

The acreage of cotton in this vicinity will be larger than it was last year. I think the co-operation of the banks and growers will be more than duplicated, and growers will receive increased support from the moneyed people. The diversification of farming is getting more into corn and potatoes than it is into cotton; in fact, the acreage of corn is getting larger every year. The general financial condition of the farmers in this vicinity is very good, and any money that they are making they are investing in lands.

Joe L. Porter, cashier Citizens' Bank of Geronimo, Geronimo, Okla.:

The acreage of cotton in this vicinity will be slightly diminished under that of last season. The above result is largely due to the farmers raising more grain, and especially feed grains. Growers have heeded the advice of cotton organizations among the farmers and of the bankers in this section of the country. Farmers are finding that their soil here will raise a greater variety of crops than was first supposed, and while cotton is a good cash crop, the difficulty in finding pickers and the uncertain manipulation of the market make them careful to raise crops that will tend to make the farmer self-resourceful as to products. General financial condition of the farmers is good, and they are investing their surplus in extra teams and fuller equipment for work. Instead of getting loans to begin operations on the farms, they are borrowing in order to carry on the business more extensively. Thanking you for your interest in getting firsthand information, and standing ready to offer any further co-operation.

Charles C. Bailey, cashier First National Bank, Bartlett, Texas:

We think there will be an increase in acreage of 5 per cent. Financial condition of farmers is growing stronger. They are investing in lands and in better teams and tools.

T. H. Nees, cashier Farmers' National Bank, Carter, Texas:

1. Acreage will be one-third less than last year.
2. Yes.
3. More corn and truck being planted.
4. Not such heavy borrowers from banks this year. Considerable pine timber being turned loose.

The commissioners of sewerage at Louisville, Ky., are circulating for the benefit of engineers and contractors a copy of the act of the legislature of Kentucky to enable cities of first class to construct a sewerage system.

## MECHANICAL

### The Peerless Hoist.

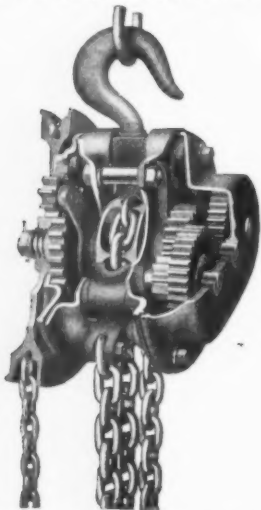
Two accompanying illustrations show the Peerless Hoist. It is stated this is the latest type of spur-gear hoist, embodying a number of new and important features tending to increase efficiency. The hoist has a single load chain, which makes it more compact and lighter in weight



THE PEERLESS HOIST.

than hoists having two chains. It has safety, combined with durability, speed and power. All working parts are thoroughly protected by dustproof cases. Oil chambers are cast in the case over the main bearings.

The hoisting mechanism consists of a train of compound, balanced, steel spur-gears, machine cut from drop forgings. This insures perfect bearing to the surface of the teeth, reducing wear to a mini-



PEERLESS HOIST—SECTIONAL VIEW.

mum and giving free and smooth action to the hoist. Since the intermediate pinions are steel and run on steel studs, they are bushed with bronze to prevent cutting.

The sustaining mechanism consists of two friction discs, between which is a leather washer. The hand-wheel is screwed upon the threaded hub of the inside disc, and in hoisting clamps both discs tightly together. The parts thus clamped act as one and rotate without friction. The other disc has teeth cut in its periphery, engaging a pinion which is car-

ried on a swinging arm. The teeth are of such a form that in hoisting they revolve noiselessly in one direction. When raising motion ceases, the teeth, unable to revolve in the reverse direction, lock in such a manner as to throw the pinion backward until its teeth engage a steel dog. This forms a positive lock, automatically binding the friction and holding the load securely at any point.

The lower, the hand-wheel, is rotated in reverse direction, which releases the friction and allows the load to descend smoothly and rapidly. When backward motion of hand-wheel ceases the discs automatically tighten and the load is held securely.

Any possible danger of the load chain slipping is eliminated by the guide and stripper. With the new flaring hand-chain guide the operator can stand clear of the load without loss of power by dragging of the chain. The Peerless Hoist is made with capacities ranging from 1000 pounds to 40,000 pounds, and is manufactured by Edwin Harrington, Son & Co. (Inc.), 17th and Callowhill streets, Philadelphia, Pa.

### New Small Electric Tools.

The General Electric Co. of Schenectady, N. Y., has recently developed several small motor adaptations which are quite interesting as showing how thoroughly electrical manufacturers are in touch with the needs of the general public



FIG. 1.—NEW SMALL ELECTRIC TOOLS.

outside of the purely electrical fields. Motors for small labor-saving machines enable the jeweler, dentist, grocer, butcher, and even their customer, the householder, to draw on his lighting circuit for economical and convenient power. The company's latest development along these lines includes an electrically-driven bench drill suitable for small work, a portable electric breast drill for the same range of require-

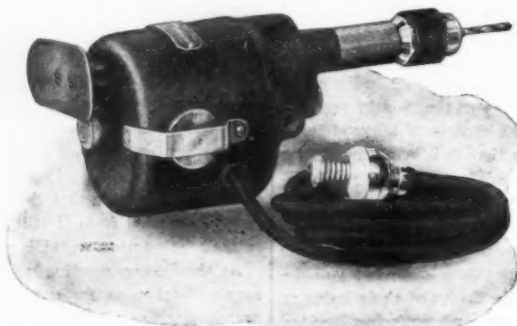


FIG. 2.—NEW SMALL ELECTRIC TOOLS.

ments and an electric buffing and grinding outfit for household use. The bench drill has been particularly designed for the use of jewelers, repair men and manufacturers who have a large amount of drilling on small work or otherwise, where the drilling service is not severe.

The bench drill, Fig. 1, is furnished with a vertical motor mounted on the top of a column sliding in a socket cast in-

tegrally with the base, in which it can be adjusted for various heights. The motor body or head is also adjustable radially for drilling position.

The whole outfit rests on a broad base about 6x10 inches, which gives the desired stability. The minimum height is 16 inches when the motor arm is in the lowest position, and the maximum height is 22 inches when the motor arm is fully raised, thus giving a range of 6 inches

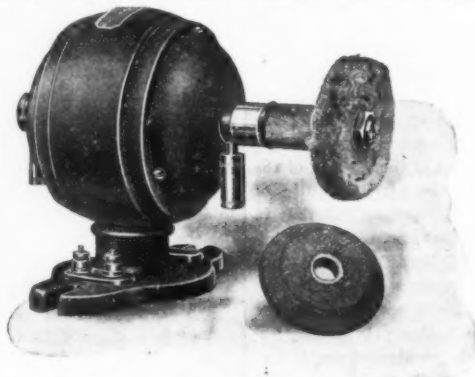


FIG. 3.—NEW SMALL ELECTRIC TOOLS.

through which the motor body may be raised or lowered. The work is fed to the drill by raising the circular table which is operated by a lever with a range of 1 1/4 inches vertically.

The motor is series wound, and can be supplied with 115 or 230 volt winding, for use on direct-current circuit only. A single gear reduction is provided between the armature shaft and drill spindle. The hand-wheel mounted on the armature shaft at the top is convenient for turning the spindle, and adds a flywheel effect to the spindle as well, thereby insuring a smooth steady rotation of the drill. The amount of power required in the operation of the drill naturally varies with the work performed, but in no case is it excessive. The largest drill the chuck will hold is 21-64 inches diameter, and from this all sizes down to No. 40.

The bearings are provided with self-oiling cups, which require attention only every three or four months. The outfit includes a chuck of standard design, 10 feet of attaching cord and Edison attaching plug. Drills are not supplied with the outfit. The weight of the bench drill complete is about 40 pounds, which ensures firmness and rigidity. The outfit is finished in black japan, with nickel-plated trimmings.

The motor used in the portable electric breast drill, Fig. 2, is similar in size and construction to the bench drill. The total is provided with a suitable switch in the body of the motor conveniently arranged

source of current supply. The oiling of the bearings is effected through protected oil holes, which replace the self-oiling features of the bench-drill motor. The use of a self-oiling bearing in which oil is stored is not practical with this drill, as the breast drill is used in all conceivable positions and oil could not be prevented from escaping out of the reservoirs. On this account the bearings of the breast drill must be oiled frequently.

The new domestic grinding and buffing outfit, Figs. 3 and 4, have been especially designed for grinding knives, scissors and other similar edged tools, and for polishing small silverware, jewelry and other like articles. A grinding wheel of suitable character to insure a smooth cutting edge without the use of a second sharpening is interchangeable with the buffing wheel. These outfits are adapted for the intermittent service required in the ordinary household, but are not suitable for the heavier continuous work which is required by jewelers, dentists, etc. Other and larger

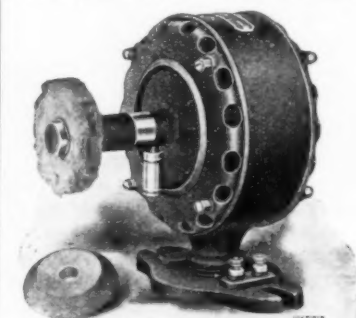


FIG. 4.—NEW SMALL ELECTRIC TOOLS.

outfits are furnished by the General Electric Co. for this more exacting service.

The household outfit consists of motor with shaft extended two inches from the end of bearing to inside of wheel, the necessary washers and nuts for holding the wheel in place, one rag wheel of 3 1/2 inches diameter, one 3-inch emery wheel 1/2 inch thick with 5/8-inch bevel face, together with attaching plug and 10 feet of cord. These outfits are furnished for 110 volts direct current and 110 volts alternating current, and can be specially wound for 220 volts.

The alternating-current motor weighs about 25 pounds. The direct-current motor is much lighter, weighing but 15 pounds. Both motors are very simple, requiring no more attention in service than a fan motor.

### New Sand-Lime Brick System.

That high-grade building material can be manufactured by the combination of common sand and a small percentage of lime, scientifically treated, has been demonstrated. Sand banks are now being transformed into money throughout the length and breadth of the land, thanks to modern science. But it must be noted that unscientific work in the preparation of sand-lime brick or composition stone in all cases, and without exception, end in finan-



cial disaster. Improperly made, and due in some instances to the use of inefficient machinery, the manufactured article will disintegrate and crumble, with the result that the walls of newly-constructed buildings of this material crack, presenting an unsightly appearance apart from the question of safety, with the result that in some instances prejudice has been created against any form of sand-lime construction material.

It is safe to assume, however, that the knowledge that construction material of this character can be permanently manufactured and susceptible of withstanding successfully climatic and other conditions which affect detrimentally the durability and other desirable properties in common brick and stone, warrant the statement that it is a distinct advance in the progress of civilization.

Germany has made important strides in this respect. A manufacturing plant, to be conducted on German methods, is now in course of construction in Jacksonville, Fla. It will be owned by the Seminole Pressed Brick Co., and the output will be 29,000 bricks daily. The particular class of machinery which it is claimed by German pressed-brick makers which makes possible the manufacture of a faultless pressed brick, the preliminary and subsequent operations being normal, consists of a press, usually of good brick capacity per day. The press is patented and is the invention of Amandus Kahl, Hamburg, Germany, three now being set and practically ready for operation in the Jacksonville plant. The location of the plant is in the center of a district where abundance of clear white sand is available, and by a conveyor-belt system the material is transported from the sand banks to the interior of the plant for manipulation.

Another novel feature in the operation of this pressed plant will be a new form of sand dryer. This latter is the invention of W. F. Saul, the constructing engineer and general superintendent of the Jacksonville plant. The formation of the sand dryer is cylindrical, steam-jacketed, and with an opening the entire length at top to permit free escape of steam caused by evaporation of water or moisture in the sand. The longitudinal section of the sand dryer is sufficiently large to permit of the operation of a 12-inch conveyor, the material being fed at one end moist and discharging at other end perfectly dry. The importance of the dryer in pressed-brick making will be better understood when it is remembered that a dry, loose sand that has 45 per cent. voids, if mixed with 5 per cent. of its weight of water, will swell, unless tamped, to such an extent that its voids may be increased to 57 per cent. The same sand, if saturated with more water until it becomes a thin paste, may show only 37½ per cent. voids after the same has settled. The sand mixers, conveying machinery, elevators, shafting, pulleys and belting, together with cylinders and brick transfer cars, are all new and of the latest design. The steam plant, which includes boilers, engine and pumping outfit, together with the great brick-treating cylinders, were made by the Riverside Iron Works, Charleston, S. C.

The cylinders are three in number, 60 feet long by 6 feet in diameter each, heavy flanged and riveted boiler iron composing the shell, the whole being set in uniform battery shape, with removal heads at one end. Along the bottom of each hand car iron track rails are laid. Fifteen cars are loaded with the newly pressed brick and switched clear into the body of each cylinder. The massive head is placed in position, and by means of asbestos packing and the setting up of powerful screwed nuts fitted into the projecting threaded bolts which bind the cylinder head to the cylin-

der, a perfect joint is made, a steam leak being impossible. A pressure of 120 pounds of steam is then maintained for 12 hours, when the heads are removed and the loaded pressed-brick cars run out.

By a convenient arrangement, which consists of a square iron box filled with lime secured beneath the flat cars, the lime is hydrated or slaked at same time as the brick is being submitted to steam treatment within the cylinder. The number of three cylinders make it convenient to operate the plant without the necessity of night work, one being loaded, another discharging and the third under steam pressure simultaneously. JOHN BANNON.

#### Eco Magneto Watchman's Clock.

Manufacturers and other owners of establishments wherein the use of the modern watchman's clock is desirable will find their attention attracted by the accom-



ECO-MAGNETO WATCHMAN'S CLOCK — PORTABLE.

panying illustration of the Eco Magneto portable watchman's clock. This clock is offered as having superior advantages over other devices of its class. It gives a legibly punched record made by a key, which, it is claimed, cannot be duplicated. In this device there is no matrix to wear and cause blurred records; there are no embossed figures or letters to take up time on dial, and there are no springs to get out of order. The record indicates almost the minute station is visited. A neat dial and hands keep the watchman informed as to the time of night and prevent disputes. This clock is manufactured by the Eco Magneto Clock Co.; Southern department at Richmond, Va.; factory in Boston.

#### A Concrete-Block Paint Shop.

By an accompanying illustration is seen a view of a concrete-block building used as a paint shop by a manufacturing com-



PAINT SHOP OF CONCRETE BLOCKS.

pany. This building, the smallest of six concrete structures owned by the company, was damaged by fire recently, and that the fire was one of the hottest imaginable is evident because of the inflammable materials it contained. The fire occurred during the night, and the entire interior was a mass of flames before the fire was discovered; hence the walls had become very hot on the inside before any water was

thrown on them, which was freely done. The firewall through the center protected the far end. At 7 o'clock on the morning after the fire work was commenced to clear the "ruins," and before night a new floor had been placed and the painters were at work before the roof or windows were replaced. The photograph was taken the morning of the second day, which shows how quickly the repairing was done. Had the outside walls been of wood, they would have been entirely consumed, on account of the fierceness of the fire and the good start it had before discovery. If they had been built from brick or stone, throwing water on the hot walls would have rendered them unfit for use without rebuilding, whereas, having been built from blocks, the shop was rebuilt the second day. The concrete blocks were manufactured by the machines built by the Waterloo Concrete Brick & Block Machine Co. of Waterloo, Iowa.

#### Crocker-Wheeler Transformers.

Although the Crocker-Wheeler Company of Ampere, N. J., has been building and marketing successfully during the past year its core-type transformers, the company's first publication on transformers was issued only recently, under date of April. The company believes that the engineering public will recognize in its transformers something which is new and of unique value. Some of the details of interest relating to Crocker-Wheeler transformers, a view of one of which is presented by an accompanying illustration, are as follows:

The sheet steel used is made expressly for the company, and has a very low hysteresis loss and high permeability. It is virtually non-aging. Being annealed in the Crocker-Wheeler furnaces, it is constantly under control.

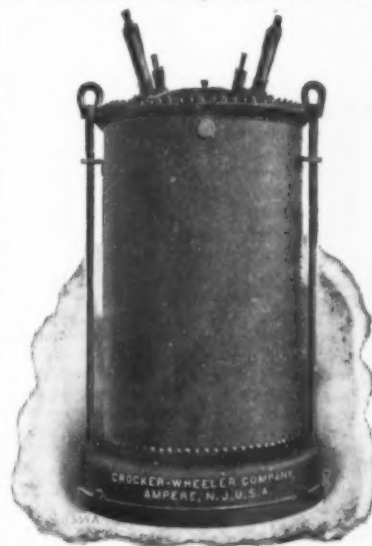
The copper is purely electrolytic and of high conductivity. In the case of heavy current being required the conductor is composed of narrow strips of copper, so that the eddy losses, which in transformers of inferior design amount to a large percentage of the ohmic losses, are reduced to a negligible amount.

The insulating material, which has the most influence upon the life of a transformer, is subjected to constant test and control, being made ready for use in the company's factory. The insulation between adjacent turns and layers in combination with the non-soluble, compound-filling, vacuum treatment renders the coils

between ¼-inch balls set .15 inch apart not less than 25,000 volts, a flashing point not less than 180 degrees Centigrade, and a burning point not less than 200 degrees Centigrade.

The fluidity of the oil is sufficiently great to maintain it in continuous circulation, which, in connection with the ample and numerous ventilating ducts, renders these transformers of a uniform low temperature.

When discussing "the relative fire risks of oil-cooled and air-blast transformers" at an A. I. E. E. meeting in 1904 it was unanimously agreed that the boiler-iron tank with cast-iron base and cover is the safest and strongest tank for power-transmission transformers. Crocker-Wheeler tanks are of heavy boiler iron and made oiltight by proper riveting and calking. The tank rests on and is bolted to a cast-iron base which in large transformers is



A CROCKER-WHEELER TRANSFORMER.

provided with wheels to facilitate locomotion.

The terminals of the windings are brought out through the cast-iron cover of the transformer tank and are insulated from it by bushings and insulators. The covering of the leads is not affected by oil, nor will it absorb moisture. The construction of the bushings and insulators will not permit leaking even when the tanks are full of oil.

In water-cooled transformers a coil of pipe is placed in the upper part of the tank surrounding the active material. The cold water circulating through this pipe will cause such a difference in temperature, and consequently in density, between the upper and lower regions of oil, that will result in an enforced circulation of this liquid. The internal heat of the transformer will then be dissipated partly by the surface of the tank into the surrounding colder atmosphere and partly by the surface of the pipe coils into the circulating cold water.

Cooling coils in these transformers are made of seamless tubing capable of withstanding a pressure of 100 to 200 pounds per square inch.

In order to enable the central-station man to use the same transformer for several voltages, the manufacturer can build these transformers so that they may be separated at full capacity at one-half and one-quarter of the highest or normal voltage without affecting core and copper losses or regulation. In other words, the magnetic flux in the transformers is uniformly distributed and the coils are symmetrically arranged so that in the case of parallel connections there are no cross-currents between the coils, and the copper loss and regulation does not increase. All leads and taps are brought out to a terminal board submerged in oil, where the required change in voltages can be readily accomplished.

mechanically so strong, solid and compact that they may be as safely handled as any other material of construction. Moreover, the resulting dielectric strength permits of two to four times the normal voltage being put across the terminals of the coil. Standard test is twice this voltage.

The transformer oil is especially treated, refined and tested in the company's own laboratories. It has a dielectric strength

# Construction Department

## TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

### EXPLANATORY.

The MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

\* Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

### ADDRESS FULLY.

To insure prompt deliver of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failure on the part of the postal authorities to deliver mail to new concerns will occur.

### WRITE DIRECTLY.

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

## ALABAMA.

Bessemer—Radiator Works.—Reports state that the American Radiator Co. of Chicago, Ill., contemplates establishing branch plant.

Birmingham—Laundry.—Incorporated: Carrollton Laundry Co., with \$15,000 capital stock. Richard Falvey is president; George Reiderschelder, vice-president, and Henry L. Favrot, secretary-treasurer.

Birmingham—Metal-bed Factory.—Birmingham Metal Bed Manufacturing Co., recently reported incorporated with \$50,000 capital stock to manufacture metal beds and spring beds, will erect a two-story building 375x90 feet.\*

Birmingham—Concrete Burial Vaults.—Concrete Burial Vault Co., 209-210 Keller Building, Louisville, Ky., will establish plant for the manufacture of concrete burial vaults, mentioned last week.

Birmingham—Coal Mines and Iron Furnaces.—It is reported Adler & Co. have purchased the controlling interest in the Tutwiler Coal, Coke & Iron Co., and it is stated the coal properties will be further developed and another stack built at the furnace at Boyles.

Birmingham—Land Improvement.—Clairmont Land Co. has been incorporated with capital of \$5000. Ross C. Smith is president; Henry L. Badham, vice-president, and Webb W. Crawford, secretary-treasurer.

Birmingham—Steel Furnaces.—It is reported that the Republic Iron & Steel Co. is arranging for the resumption of operations at the two steel furnaces located at the Birmingham Rolling Mills site; daily capacity 50 tons each. James Murphy will be in charge; general offices, First National Bank Building, Chicago, Ill.

Elba—Mill.—Whitewater Mill Co. has been incorporated with \$25,000 capital stock by J. W. Wise, W. J. Wise, F. M. Wise and associates.

Ensley—Land Improvement.—Ensley South Highland Company will develop as suburban site 40 acres of land adjacent to the city, recently purchased.

Enterprise—Saw, Shingle and Corn Mill.—Enterprise Milling & Manufacturing Co., recently reported incorporated with \$5000 capital stock, will operate saw-mill with a capacity of 7000 feet, shingle mill with a daily output of 10,000 feet and corn mill. Water-power will be used to operate same. Machinery has been purchased; W. B. Glenn, secretary-treasurer.

Florence—Brick Works.—A company has been organized with F. D. Green, president; S. P. Merrill, secretary-treasurer, and U. S. Hauerwas, general manager, to take over and operate the plant of the Hauerwas Brick Co. It is proposed to improve the plant and install new machinery.

Gadsden—Land Improvement.—Gadsden Realty Co. has been incorporated with \$150,000 capital stock. E. G. Cole is president; O. R. Hood, vice-president, and L. L. Herzberg, secretary-treasurer. It is stated that about 600 acres of land have been acquired for development purposes.

Greenville—Sewerage and Street Improvements.—City contemplates issuing bonds for sewerage and street improvements. Arthur Pew, Temple Court Building, Atlanta, Ga., was previously reported as preparing plans for extending sewerage system; J. J. McMullen, mayor.

North Birmingham—Hardwood Lumber.—Fowler & Personette Lumber Co., it is reported, will make improvements to plant in increasing the capacity.

North Birmingham—Sewer-pipe Works.—It is reported that the Southern Sewer Pipe Co. will arrange for the enlargement of plant, doubling present capacity.

North Birmingham—Foundry and Machine Shop.—Thomas Purvis, 23d street and Twenty-eighth avenue, will erect foundry 40x60 feet and machine shop 35x150 feet; brick construction; equipping for the manufacture of Fox revolving sandirons and other patent products and electric plating. (This enterprise referred to last week.)\*

North Birmingham—Railroad Repair Shops, etc.—It is reported that the Illinois Central Railroad has acquired 100 acres of ground near North Birmingham on which to erect proposed shops, roundhouses, freighthouses, etc. J. T. Harahan, Chicago, Ill., is vice-president.

Selma—Cotton-rope Mill.—W. O. Kenan will probably establish cotton-rope and twine mill; machinery not purchased.\*

Sycamore—Cotton Mill.—It is reported that John A. Lewis and associates have awarded contract to A. O. Howell of Talladega, Ala., for the erection of buildings for their proposed cotton mill.

## ARKANSAS.

Batesville—Lumber Plant.—Martin-Massey Lumber Co., reported incorporated last week with \$20,000 capital stock, will manufacture yellow-pine-finish flooring and ceiling. A building 50x100 feet will be erected; about \$4500 invested. J. A. Martin is president; C. F. Cole, vice-president; J. W. Martin, secretary, and W. D. Massey, treasurer.

Berryville—Lumber Plant.—Baker Lumber Co. has been incorporated with an authorized capital stock of \$100,000 by H. J. Dittman, F. E. Ayers, T. R. Bingham, S. W. Mercer and others.

Fort Smith—Southwestern Mine & Mill Supply Co., reported incorporated last week with \$20,000 capital stock, will operate foundry and machine shop, manufacturing chilled-wheel self-oiling mine cars, deal in machinery and supplies. Buildings have been secured. W. A. Butterfield is president; Ben Wood, vice-president and manager, and J. B. Parkinson, secretary-treasurer; office, 306-308 South 5th street.\*

Fort Smith—Telephone System.—Pan Long-Distance Telephone Co. has been incorporated with \$1,000,000 capital stock. Charles Sutter is president.

Little Rock—Laundry.—Rose City Co-operative Laundry Co. has been incorporated with \$6100 capital stock by J. N. Cypert, A. M. Ivy, C. W. Peterson and associates.

Little Rock—Steel Viaduct.—Ottumwa (Iowa) Bridge Co. has contract for erecting steel viaduct at Main and 8th streets; cost \$40,000.

Weiner—Land Improvement.—Weiner Development Co. has been formed by Dr. E. L. Jacobs, Ed L. Jacobs and J. G. Probst. Arrangements will be made at once for developing 103 acres of land adjacent to Weiner as resident site.

Wynne—Steam Laundry.—Chartered:

Wynne Steam Laundry Co., with \$5000 capital stock, by C. J. Pounds, F. D. Rolfe, J. S. Calhoun and associates.

## FLORIDA.

Jacksonville—Sand-lime Brick, etc.—Seminole Pressed Brick Co. has been incorporated to manufacture sand-lime brick, tiles, etc. About \$35,000 will be invested in buildings and equipment. R. Cay is president.

Ocala—Saw-mill.—Sumner Lumber Co., reported incorporated recently with \$37,000 capital stock, will erect saw-mill 50x150 feet, three dry-kilns, planer, stock sheds, etc.; daily capacity from 40,000 to 60,000 feet. Equipment has been purchased; main office, Moultrie, Ga.

Pensacola—Sewerage System.—Bids for the construction of sewerage system recently asked have been rejected as being above appropriation, and new bids will be received until June 1; T. Chalkley Hatton, consulting engineer, 608 Market street, Wilmington, Del.; L. Hilton Green, chairman board of bond trustees.\*

Port Orange—Bridge.—S. H. Gove has contract to build bridge over the Halifax river for the Port Orange Bridge Co.; cost \$20,595.

St. Augustine—Seawall.—Albert Lewis has let contract to B. E. Pacetti for the construction of seawall; to be of concrete 260 feet long; front wall to be 100 feet long and two side walls 55 and 75 feet, respectively. Contract has also been let for the erection of bathhouse.

St. Petersburg—Transportation Company.—Tampa Bay Transportation Co. has been incorporated with \$50,000 capital stock; C. E. Burns, president; J. E. Wilson, vice-president, and T. K. Wilson, secretary-treasurer.

Tampa—Garbage Crematory.—Dixon Garbage Crematory Co., 1902 Spitzer Building, Toledo, Ohio, has contract for building proposed garbage crematory for the city; to have a capacity of 100 tons in 24 hours; cost \$27,755.

## GEORGIA.

Atlanta—Electric-power Plant.—Georgia Railway & Electric Co., it is reported, is arranging for remodeling and installing machinery in substation used to supply the underground electric current to the city; cost \$19,000.

Atlanta—Roll-covering Plant, etc.—American Manufacturing Co. will rebuild that portion of plant recently burned at a loss of \$3500. It is proposed to install a roll-covering plant with a daily output of 6000 to 10,000 rolls. Machinery has been ordered.

Atlanta—Gas Plant.—Southern Gas Co., 69 Inman Building, has applied for franchise to establish gas plant.\*

Baxley—Navigation Company.—Altamaha Navigation Co. has been incorporated with \$16,500 capital stock by C. W. Melton, V. H. McQuarrie, J. E. Melton and others.

Carrollton—Road Improvements.—Carroll county will vote on the issuance of \$250,000 of bonds for building and improving public highways. Address County Clerk.

Cedartown—Cotton Mill.—Standard Cotton Mills contemplates adding 3600 spindles and other machinery next fall; now has 12,600 mule spindles.

Columbus—Spinning and Knitting Mill.—Perkins Hosiery Mills contemplates increasing spinning capacity about 30 per cent; now has 4000 spindles and complement; also contemplates adding machinery for products other than 84-needle hosiery.

Dublin—Brick and Lumber Plant.—Dublin Brick & Lumber Co. has been incorporated with \$25,000 capital stock. S. H. Fuller is president; J. H. Beacham, secretary-treasurer, and B. M. Grier, manager.

Dublin—Speedway.—It is reported that a five-mile speedway 60 feet wide will be built around the city, and H. H. Smith is promoting the enterprise.

Forsyth—Cotton Mill.—Trio Manufacturing Co. contemplates increasing equipment to 10,000 spindles; now has 3000 spindles.

Hazlehurst—Cement-block Factory.—Granite Cement Block Co. is arranging for the manufacture of cement building blocks. Machinery has been purchased.

Lagrange—Cotton Mill.—Elm City Cotton Mills is expected to award contract on May 3 for erection of its buildings; main structure of brick; mill construction; 100x450 feet; steam-heating plant; electric-lighting fixtures; belt-power freight elevator, etc.; also to award contract for erecting standard warehouse 100x200 feet and 100 cottages for operatives. This mill is to contain 10,000

spindles and complement of looms for manufacturing duck. Its power plant will include five boilers of 150 horse-power, a compound Corliss engine of 700 horse-power, a 75-kilowatt electric generator, etc. The company was mentioned April 12 as calling for bids on these buildings. Bids for machinery will probably be opened later in May. A. F. Walker, Austell Building, Atlanta, Ga., is engineer in charge. Roy Dallis is general manager.

Lawrenceville—Cotton Mill.—Lawrenceville Manufacturing Co. contemplates adding 5000 spindles; now has 4648 spindles.

Macon—Automobile Factory.—It is reported that the establishment of an automobile factory is being considered, and Ben L. Jones is interested.

Montezuma—Lumber Plant.—McKenzie Lumber Co. has been incorporated with \$15,000 capital stock by W. L. McKenzie and Oscar McKenzie.

Nashville—Electric-light Plant and Water-works.—City is considering the establishment of electric-light plant and water-works. Address The Mayor.

Rome—Cannery.—It is reported that a \$10,000 company will be organized to establish cannery, and the secretary of Merchants and Manufacturers' Association, Armstrong Hotel Building, can give information.

Rome—Rope and Twine Mill.—Cherokee Water Mills is considering the erection of a cotton-rope and twine mill; machinery not purchased.\*

St. George—Cotton Gin and Grist Mill.—S. O. Smith & Co. have let contract for the construction of proposed cotton gin and grist mill.

The Glades—Timber Development.—H. H. Deen, J. H. Hunt and Quillan Bros., previously reported as having purchased the entire Glades properties, embracing 7000 acres of land, 5000 of which is heavily timbered, are arranging for the erection of several saw-mills with a cutting capacity of 20,000 to 25,000 feet daily.\*

Thomasville—Cotton Compress.—Atlantic Compress Co., 1614 Candler Building, Atlanta, Ga., reported last week as having purchased the plant of the Georgia & Alabama Compress Co., has let contract for two sheds, each 140x150 feet, which will be connected to present shed, 140x200 feet, making a continuous shed 140x500 feet, constructed of wood with iron roofing. About \$5000 will be expended in improvements; capacity 10,000 bales of cotton.

Waynesboro—Cottonseed-oil Mill.—Southern Cotton Oil Co. is reported to make extensive improvements at both plants, including erection of cotton gin and enlargement of fertilizer factory and improvements to ginnery. A steel tower 100 feet high is in course of erection at latter plant, on which will be placed a 50,000-gallon steel tank for water supply.

## KENTUCKY.

Coalport—Coal Mines.—Coalport Coal Co., previously reported organized with S. Shaffer, president and general manager; W. C. Black, vice-president and treasurer; W. T. Shaffer, secretary, and C. E. Shaffer, assistant secretary and assistant treasurer, will develop 1500 acres of coal lands, opening two or three mines. Machinery has been contracted for, and the company will begin shipping coal by July 1.

Curdsville—Flour Mill.—Henry McCaul, William Tuck and associates will erect flour mill.

Cynthiana—Glove Factory.—It is proposed to establish a glove factory, and Wm. Addams, president of the Commercial Club, can give information.

Cynthiana—Tobacco Factory.—The establishment of a tobacco factory is being considered, and Wm. Addams, president of the Commercial Club, can give information.

Cynthiana—Overall Factory.—Cynthiana Overall Co., referred to last week, will manufacture overalls and working jackets, having a daily capacity of 90 dozen. Size and character of building to be erected has not been decided on. H. C. Shipp is president; B. F. Goldamer, vice-president; C. H. Cox, secretary, and H. S. Withers, treasurer.\*

Louisville—Concrete Burial Vaults.—Concrete Burial Vault Co., 209-210 Keller Building, will establish plants at Louisville, Memphis, Tenn.; New Orleans, La., and Birmingham, Ala., for manufacturing concrete burial vaults.

Louisville—Park Improvements.—Clarence Mackay and Robert Collier of New York,



N. Y., representing the Lincoln Memorial Association, are arranging for improvements to the Lincoln home place in Larue county, containing 110 acres of land, as a national park. It is estimated that \$50,000 will be expended in improvements. Guy Lowell, landscape artist, of Boston, Mass., has made various suggestions for improving the tract which will be carried out; offices of association located at 74 Broadway, New York, N. Y.

Louisville—Woodworking Plant.—R. B. Tyler is organizing company for the establishment of plant to manufacture stepladders, yardsticks, rulers, penholders, rubber-stamp bases and other small articles.\*

Mt. Sterling—Glove Factory.—Enoch Manufacturing Co., operating lunch-box factory, has erected addition and is installing machinery for the manufacture of cotton-dan-nel and husking-cloth gloves. Machinery has been purchased.

Owensboro—Flour Mill.—J. W. Gilbert's Sons, it is reported, will erect addition to flour mill and repair and remodel present plant recently damaged by fire.

Owensboro—Flour Mill.—Mrs. M. Hazel will rebuild flour mill recently burned.

Owensboro—Planing Mill.—Owensboro Planing Mill Co. will erect planing mill 80x140 feet. About \$10,000 will be invested in buildings and equipment.\*

Owensboro—Saw-mill.—Reports state that Z. T. Robinson will erect saw-mill.

Pikeville—Timber Development.—Reports state that E. D. Hewitt of Bluefield, W. Va., has purchased a large tract of timber land in Pike county and will arrange at once for its development.

White Ash—Coal Mines.—South Fork Coal Co. has opened a second mine at its former plant and is now shipping from both mines; Henry Mace Payne, Williamson, W. Va., engineer.

#### LOUISIANA.

Bogalusa (not a postoffice).—Lumber-manufacturing Plant and Mill Town.—Last November the Manufacturers' Record announced the purpose of the Great Southern Lumber Co. to build a lumber-manufacturing plant on its railway between Slidell, La., and Jackson, Miss. It is now stated that the mills will be located in Washington parish, Louisiana, where a mill town to be called Bogalusa will be developed, 2000 acres of land to be utilized for these purposes. The mill plant and town will represent an investment of \$1,500,000. Most of the contracts have been awarded, and all buildings are expected to be completed and the mill in operation by March 1, 1907. The American Bridge Co. of Pittsburg, Pa., has contract for the erection of mill plant to embrace saw-mill, power plant, dry-kilns, docks, planing mill, etc.; steel and concrete construction. Stevenson & Adams, Pittsburg, Pa., have contract at \$67,000 for building 40 houses for the managers and clerical force; Bowen & Thomas, Brunswick, Ga., have contract at \$14,000 for building 200 operatives' houses. Contract for excavations and concrete foundations of mill buildings has been let to T. J. Shea of New Orleans, La., at about \$100,000. The most improved machinery and equipment for sawing, manufacturing and finishing lumber will be installed, and the plant will have a daily capacity of 600,000 feet of lumber; general offices of the company at 950 Elliecott Square, Buffalo, N. Y.; F. H. Goodyear, president.

Bogalusa (not a postoffice).—Railroad Shops. New Orleans & Great Northern Railroad, C. W. Goodyear, vice-president, 950 Elliecott Square, Buffalo, N. Y., is arranging for the location of repair shops at Bogalusa.

Covington—Sash, Door and Blind Factory. Ozone Lumber & Building Supply Co., it is reported, will erect sash, door and blind factory.

Floyd—Saw-mill and Stave Factory.—Pioneer Coopers Co. will erect saw-mill 36x113 feet and stave factory 180x180 feet. This enterprise was recently referred to.

Morgan City—Ship Channel.—Atchafalaya Ship Channel Co. has been organized with \$250,000 capital stock. F. B. Williams of Patterson, La., is president; E. A. Pharr, vice-president and manager; Charles A. Bibbins, secretary, and Herbert M. Cotton, treasurer, all of Morgan City.

Napoleonville—Planting Company.—Dilvia Planting Co. has been incorporated with \$48,000 capital stock. L. P. Landry is president; John Jumonville, vice-president, and St. B. Valetton, secretary-treasurer.

New Orleans—Electric Burglar Alarm.—Kreh Pocket Electric Burglar Alarm Co. has been incorporated with \$50,000 capital stock to manufacture a patented pocket electric burglar alarm. Dr. Armand Mary is president; Herman A. Kreh, vice-president, and Max Kreh, secretary-treasurer and manager.

New Orleans—Ornamental and Architectural

Iron.—C. Gast Manufacturing Co. has been incorporated with \$50,000 capital stock to manufacture ornamental and architectural iron. G. Gast is president.

New Orleans—Concrete Construction.—Concrete Construction & Contracting Co., mentioned recently as incorporated with \$100,000 capital stock, will engage in building concrete structures, as well as all classes of street and sidewalk paving and composition flooring and roofing. Wm. Demorelle is president; Frank Altmeyer, vice-president, and John F. McCoy, secretary-treasurer; office, 325 Camp street.\*

#### MARYLAND.

Baltimore—Novelties.—The Philip-Welch Manufacturing Co. has been incorporated with capital stock of \$12,500 to manufacture novelties by Philip Hamberger, Jr., 709 East Lombard street; George A. Welch, 28 North Patterson Park avenue; Harry Hamberger, 709 East Lombard street; Mark Hamberger and Eli Frank.

Baltimore—Furniture Factory.—George Spindler, furniture manufacturer, 608-610 West Pratt street, will erect an addition to his factory; four stories, 82x50 feet; brick with stone trimmings; slag roof. J. H. Miller, 110 Dover street, and Frederick Decker & Son, 1209 East Biddle street, are estimating on construction.

Baltimore—Printing Plant.—Referring to printing plant to be erected at Greenmount and Oliver streets by the Friedenwald Company, printers and lithographers, Baltimore and Eutaw streets, the following contractors are estimating on construction: Hopkins-Barnett Company, Calvert Building, Fayette and St. Paul streets; J. J. Walsh & Son, 1525 Maryland avenue; Henry Smith & Sons Company, 116 South Regester street; Wm. Ferguson & Bro., 214 Clay street; Morrow Bros., 212 Clay street; Brady & Watters, 532 St. Paul street, and John Hilts & Son, 3 Clay street; three stories, 80.4x274.2 feet; reinforced construction throughout; slag roof; metal frames and sashes; 30,000-gallon water tank; electric wiring and fixtures; sanitary plumbing; steam-heating system; elevators. Bids to be in April 30; Ballinger & Perrot, architects, 1200 Chestnut street, Philadelphia, Pa.

Baltimore—Enameling Plant.—John P. Ulrich, 222 Marion street, has awarded contract to Harry W. Johnson, 27 West Oliver street, for the construction of enameling plant at 730 West German street; two stories, 14.4x40 feet; brick with tin roof.

Baltimore—Factory Building.—The St. Mary's Industrial School, Wilkens and Caton avenues, has awarded contract to James J. O'Connor, 1611 E. Preston street, for the construction of an additional factory building; three stories, 50x100 feet; reinforced-concrete construction; cost about \$22,000; Tormey & Leach, architects, 323 North Charles street.

Baltimore—Electrical Construction.—The G. E. Watts Electrical Construction Co. has been incorporated with a capital stock of \$1000 to conduct an electrical-construction business by Samuel M. Sachs, 654 West Baltimore street; J. J. McNulty, 4 Gray Elderkin, 1704 West Lafayette avenue; W. N. Hechheimer and Harry Hechheimer, 212 West Fayette street.

Baltimore—Blast Furnace and Rolling Mills. It is reported that Clarkson, Brooks & Co., 100 Broadway, New York, representing manufacturers of iron and steel, are looking for available site for the establishment of blast furnaces and rolling mills.

Baltimore—Silverware Factory.—All bids submitted have been rejected for the construction of silverware factory for the Higbee-Barbour Manufacturing Co. of Brooklyn, N. Y., of which George F. Buchholz is president, and the construction work will be done under the supervision of Mr. Buchholz; three stories, 50x150 feet; Henry J. Tinley, architect, Hoffman Building, 11 East Lexington street.

Baltimore—Grain Tank.—The Baltimore Pearl Hominy Co., 309 Calvert Building, Fayette and St. Paul streets, has awarded contract to the Grain Storage Construction Co., Buffalo, N. Y., for the construction of grain tank at plant it is erecting at Howard and Ostend streets. Tank will be 45 feet in diameter and 50 feet high; steel construction; reinforced concrete foundation on piling; cost about \$11,000.

Braddock Heights—Road Improvements.—Oscar B. Coblenz, Frederick, Md., has contract at \$9406 for macadamizing road at Braddock Heights, recently mentioned.

Cumberland—Limekilns.—Cumberland Hydraulic Cement & Manufacturing Co., it is reported, has purchased 140 acres of limestone land and contemplates installing kilns.

Myersville—Grain Elevator.—Farmers' Mutual Exchange of Frederick County has been organized with \$10,000 capital stock by John T. Gaver and others to build elevator.\*

#### MISSISSIPPI.

Aberdeen—Cottonseed-oil Mill, Fertilizer Factory and Ice Plant.—J. J. Wright of Birmingham, Ala., it is reported, contemplates organizing company with \$75,000 capital stock to establish 60-ton cottonseed-oil mill, fertilizer factory and ice plant.

Biloxi—Brick and Tile Works.—Clermont Brick & Tile Co. has been organized by Geo. Gombel, O. E. Thompson and J. A. Broadus to manufacture brick, tile, etc. Mr. Broadus will be secretary.\*

Columbus—Cotton-comfort Mill.—Columbus Comfort & Manufacturing Co. will enlarge plant so as to manufacture wool-filled comforters in addition to present high-grade cotton-filled goods.

Hattiesburg—Wood-alcohol Plant.—Lignum Products Co., recently incorporated with \$250,000 capital stock, has begun the erection of plant for transforming sawdust into alcohol.

Hilwanee—Lumber-plant Improvements.—Hilwanee Lumber Co. has begun improvements at plant, doubling the present capacity, installing planers, steam dry-kilns, etc., and building a standard-gauge logging road.

Meridian—Electric-light Plant.—W. J. Dalton, W. F. Johnston, M. P. Johnston and associates have incorporated the Dalton Electric Co. with \$7500 capital stock.

Waynesboro—Brick and Tile Works, Electric-light Plant.—Waynesboro Brick & Manufacturing Co. has been incorporated with \$10,000 capital stock by R. W. Fagan, E. P. Ballard, H. H. Moore and associates to operate brick and tile works, electric-light plant; capacity 1000 lights.\*

#### MISSOURI.

Granby—Iron Mines.—T. J. Jones of Webb City, Mo., is arranging for the development of iron-ore property near Granby and has let contract for drilling 1000 feet.

Joplin—Overall and Coat Factory.—Joplin Overall Co., manufacturer of overalls and coats, will erect three-story brick building 30x30 feet; T. R. Bellas, architect. A. Cahn is manager.

Kansas City—Land Improvement.—Tom D. Marra, Frank H. Anderson and J. H. McKinstry have incorporated the Panhandle & Pecos Valley Land Co. with \$2100 capital stock.

New Madrid—Electric-light Plant.—Harry B. Day will erect two-story brick building, 30x50 feet, replacing electric-light plant reported recently as burned.\*

St. Louis—Sash, Door and Blind Factory.—Banner Sash & Door Co., reported incorporated last week with \$15,000 capital stock, will operate sash, door and blind factory; main building to be one story, 70x122 feet, of cement blocks; shavings-house, 18x20 feet; one shed, 24x48 feet, and one shed, 24x70 feet. About \$7500 will be invested in buildings and equipment. Machinery has been purchased. William Ruprecht is president; Fred Holstein, vice-president, and J. P. O'Neill, secretary-treasurer and architect in charge; office, 8025-27-29 South Broadway.\*

St. Louis—Publishing.—Chartered: C. V. Mosby Medical Book & Publishing Co., with \$15,000 capital stock, by C. V. Mosby, L. A. Duck, C. R. Lightner and associates.

St. Louis—Sanitary Flooring.—A. G. Douglass, Henry Dreyer, Howard L. O'Fallen and others have incorporated the Sanitary Flooring Co. with an authorized capital stock of \$6000.

St. Louis—Bed Factory.—Imperial Patent Bed Co. has been incorporated with \$30,000 capital stock by George A. Mellon, Wm. A. Denvir and associates.

St. Louis—Electric Construction.—Independent Electric Co. has been incorporated with \$10,000 capital stock by John Dowd, George J. Clark and E. F. Cunningham.

St. Louis—Distilling Company.—Bauer-Miller Distilling Co. has been incorporated with \$10,000 capital stock by Charles W. Bauer, Julius F. Mueller and Julia A. Bauer.

St. Louis—Rubber Cement.—St. Louis Rubber Cement Co. has secured site on which to erect fireproof factory building for the manufacture of rubber cement.

St. Louis—Machine Works.—Elliott-Barry Engineering Co. has been incorporated with \$30,000 capital stock to manufacture and deal in heating, cooling, ventilating, draining, plumbing and lighting apparatus and machinery; incorporators, Fred A. Elliott, James Barry, Daniel Hogan and others.

#### NORTH CAROLINA.

Andrews—Timber Development.—F. C. Cover, it is reported, has purchased 30,000 acres of timber land in Cherokee and clay counties and will arrange at once for its development, erecting saw-mills.

Biscoe—Cotton Mill.—Francis Cotton Mills, recently reported incorporated with capital stock of \$200,000, has organized with J. R. Page, president; A. W. E. Capel, treasurer, and W. T. Hurley, superintendent. This company will build a mill of 7500 ring spindles, to be operated by steam power.

Brevard—Water-power-Electrical Plant.—Brevard Light & Power Co., J. W. Chapman, manager, is arranging for the development of the water-power of Hamilton's Falls on Little river, which will be transmitted by electricity to Brevard, a distance of seven miles. Chas. E. Waddell, Biltmore, N. C., is consulting engineer. (This enterprise was referred to last week.)

Brookford—Cotton Mill.—The Brookford Mills will add 6000 spindles and 300 looms to present plant; no new construction required. Contract for machinery has been awarded.

Charlotte—Leather Belting, etc.—V. J. Guthery and J. A. Schachner have secured building and are installing machinery for the manufacture of leather belting and kindred cotton-mill supplies. They will operate as the Charlotte Leather Belting Co.\*

Cherryville—Cotton Mill.—Vivian Cotton Mills intends to double plant this year; now has 1632 spindles.

Durham—Cotton Mill.—Golden Belt Manufacturing Co. will add 2000 spindles about June 1; present equipment 24,416 spindles and 610 looms.

Durham—Hosiery Mill.—Durham Hosiery Mills will add 3136 ring spindles; present equipment 1776 ring spindles, 11,218 mule spindles, 800 knitting machines, etc.

Elizabeth City—Transportation Company.—Eastern Carolina Transportation Co. has been organized with \$10,000 capital stock to operate a steamboat line between Elizabeth City and Manteo, N. C. C. E. Kramer is president; C. W. Melick, vice-president; E. F. Lamb, secretary-treasurer, all of Elizabeth City, and W. J. Griffin of Manteo, N. C., general manager.

Elkin—Cannery.—Incorporated: Elkin Canning Co., with an authorized capital stock of \$25,000, by E. E. Harris, R. M. Chatham and others.

Evergreen—Lumber Company.—Jacob Ersenberger and others have incorporated the Evergreen Lumber Co. with an authorized capital stock of \$35,000.

Greensboro—Machine Shop.—Chartered: Wyland-Newman Machine Co., with George C. Wyland of Williamsport, Pa., president; R. S. Petty, vice-president, and George F. Newman, secretary-treasurer, both of Greensboro; capital stock \$100,000. The main building will be two stories, of brick, 150x200 feet.

Greenville—Ice Factory.—It is reported that R. Greene will establish ice factory.

Hickory—Hosiery Mill.—W. P. Cline and associates will organize company with authorized capital stock of \$100,000 to build hosiery mill; machinery not purchased.

Kernersville—Lumber Plant.—Robert W. Ring and F. E. Stafford of Winston-Salem, N. C., will establish plant for manufacturing lumber and building materials.

Kinston—Silk Mill.—William H. Ashley of Hackettstown, N. J., is reported as to organize company, probably to be called the Kinston Spinning Co., to establish a silk mill.

Lagrange—Tobacco Stemmy.—Lagrange Tobacco Stemmy has incorporated with an authorized capital stock of \$15,000 by W. H. Winstead, John Fuller, Jr., W. N. Parks and others. It is proposed to erect a frame building 64x119 feet with metal roof, one 11-foot story and a 7-foot jump. Between \$7000 and \$8000 will be invested; capacity for redrying 5000 pounds daily.\*

Lenoir—Furniture Company.—Incorporated: Chiles-Jones Furniture Co., with \$25,000 capital stock, by J. M. Chiles and others.

Louisburg—Cotton Mill.—G. W. Ford contemplates building a 5000-spindle cotton mill. No machinery has been purchased.\*

Marshall—Cotton Mills.—Capitola Manufacturing Co. will add 4000 spindles in September; now has 5000.

Mt. Holly—Cotton Mill.—Mt. Holly Mills expect to add from 1000 to 1500 broad spindles and other machinery; now has 2000 spindles.

Raleigh—Brick Works.—Raleigh Press Brick Co. has been incorporated with an authorized capital stock of \$10,000 by T. T. Hay, John W. Harden, Jr., and Joel D. Whitaker.

Roanoke Rapids—Cotton Mill.—Rosemary Manufacturing Co. contemplates building an addition of 5000 spindles and 148 looms; present equipment 12,000 spindles and 148 looms.

Rockingham—Mattress Factory.—Leak, Wall & McTae are building addition to mattress factory.

Salisbury—Whiskey Distillery.—King Distilling Co. has been incorporated with \$10,000

capital stock by W. M. King, T. F. Bailey and W. A. Hendricks.

**Saxapahaw—Cotton Mill.**—The White-Wilhamson Company, reported incorporated last week with a capital stock of \$200,000, has a mill of 5000 spindles and 200 looms. It expects to add 2500 spindles and to replace 22 old cards with new apparatus; will also add intermediates, drawing and fine speeders and spoolers.

**Shelby—Cotton Mill.**—Shelby Cotton Mills contemplates adding six cards and 1040 spindles in order to balance equipment; now has 7488 spindles and 250 looms.

**Spencer—Sewer System.**—City has awarded contract to L. B. Brickenstine for the construction of proposed sewer system, to cost approximately \$18,000.

**Spray—Cotton Mill.**—German-American Company contemplates increasing 12,000 spindles during the next six months; now has 22,000 spindles and 300 looms.

**Statesville—Cotton Mill.**—Bloomfield Manufacturing Co. will double capacity of its mill; present equipment 4700 spindles.

**Statesville—Knitting Mill.**—Bradford Knitting Mills, reported incorporated last week with a capital stock of \$100,000, has elected Eugene Morrison, president; C. S. Tomlin, vice-president, and J. A. Bradford, secretary-treasurer. Details of plant will now be considered.

**Weldon—Silk Mill.**—The Chockoyette Mills, reported incorporated in February with a capital stock of \$50,000, is now installing 50 looms and other machinery in the building which was previously secured. Silks and satin linings will be manufactured. M. W. Ransom is president.

**Wilmington—Steel Bridge.**—Reports state that the Atlantic Coast Line Railroad is arranging for the construction of proposed modern double-track steel bridge across Smith creek. E. B. Pleasants is chief engineer.

**Winston-Salem—Granite Quarry, etc.**—Consolidated Granite Co., mentioned recently as incorporated with \$150,000 capital stock to take over the business of C. A. McGalliard & Son, has completed organization with Wm. A. Blair, president; Lachlan McGalliard, vice-president; G. W. Patterson, secretary-treasurer, and C. A. McGalliard, superintendent. It is proposed to improve plant and operate on an enlarged scale.\*

**Winston-Salem—Gas Plant.**—Williams & Sinclair of Oshkosh, Wis., it is reported, have purchased the plant of the Winston-Salem Gas & Lighting Co.

**Worth—Cotton Mill.**—Harden Manufacturing Co. is building a rock dam and installing some new cards. It wants to put in looms later.

#### SOUTH CAROLINA.

**Anderson—Cotton Mill.**—H. C. Townsend expects to double his cotton mill; now has 2280 ring spindles and uses electric power. No machinery has been purchased.\*

**Batesburg—Concrete-stone Company.**—Chartered: Concrete Stone Contracting Co., with \$3000 capital stock, by W. J. McCarthy and M. E. Rentland.

**Bishopville—Water-works.**—Town has voted affirmatively the \$5000 bond issue previously reported for extending water-works. Address Town Clerk.

**Blaney—Kaolin-mining.**—Southern Kaolin & Aluminum Co., reported incorporated last week under Columbia, S. C., with \$100,000 capital stock, has completed organization with E. O. De Pass of Columbia, president; Wm. S. Leib, vice-president; Theodore Loder, secretary, both of Philadelphia, Pa., and E. O. De Pass of Columbia, treasurer. It is proposed to mine and ship kaolin and later establish plant for manufacturing aluminum.

**Charleston—Fertilizer Factory.**—Planters' Fertilizer & Phosphate Co., reported incorporated last month with \$350,000 capital stock to establish plant with a capacity of 10,000 tons, has completed organization with W. H. Welch, president; George A. Wagoner, vice-president, and Julius D. Koster, secretary-treasurer.

**Clinton—Cotton Mill.**—Lydia Cotton Mill will add 10,000 spindles and 150 looms during the next year; now has 20,000 spindles and 450 looms.

**Clinton—Water-works and Electric-light Plant.**—City will receive bids until May 29 for the construction of water-works and electric-light plant; Charles C. Wilson, consulting engineer, 1302 Main street, Columbia, S. C.\*

**Clover—Cotton Mill.**—Clover Cotton Manufacturing Co. will add 5000 spindles, with necessary preparatory machinery; now has 15,000 spindles.

**Columbia—Land Improvement.**—Shandon Annex Co. has been organized by Julius H. Walker, J. Sumter Moore and Bruce W. Rave-

nel for the development as suburban site of 90 acres of land recently purchased.

**Greenville—Cotton Mill.**—Vardry Cotton Mills, reported incorporated last week with a capital stock of \$75,000, has building and some machinery. It has water-power developed, wheels installed and boilers, and will probably install a small supplementary engine. The company's building has a capacity of 5000 spindles, and these will be purchased, besides dyeing plant. L. M. McBee will be president-treasurer, and J. W. Roberts, superintendent.\*

**Greer—Hardware.**—Thompson Hardware Co. has been incorporated with \$10,000 capital stock. W. M. Thompson is president.

**Hamer—Cotton Mill.**—Hamer Cotton Mill will add 5000 spindles to present equipment of 7168 spindles. Company has one-story brick building, 80x300 feet, completed and ready for machinery; heating and sprinkler systems, additional boiler, shafting pulleys, etc., will be installed, and engine will be compounded.

**Irene—Cotton Mill.**—Saxe Gotha Mills intends to double the capacity of its spinning-room; now has 5000 spindles and 242 looms.

**Jefferson—Printing Plant.**—Chartered: Jefferson Printing & Publishing Co., with F. M. Welsh, president.

**Mars Bluff—Lumber Company.**—W. L. Rankin Lumber Co. has been incorporated with \$50,000 capital stock by W. H. Haigh and A. A. McDonald.

**Pickens—Cotton Mill.**—Pickens Cotton Mills, reported last week as to be organized with capital stock of \$250,000, proposes to install 15,000 spindles and complementary machinery for manufacturing cloth. The company has not permanently organized, but will probably effect organization soon. W. M. Hagood of Easley, S. C., will be president and treasurer.

**Rock Hill—Cotton Mill.**—Highland Park Manufacturing Co. will add 8000 spindles, contract having been practically awarded. No new construction required; present equipment \$192 spindles and 736 looms.

**Rock Hill—Cotton Mill.**—Victoria Cotton Mills will install 2440 new spindles; now has 9216 spindles and 300 looms.

**Rock Hill—Broom Factory.**—A. E. Smith and J. R. D. Smith will erect two-story building, 40x48 feet, and equip for a daily output of 100 dozen brooms, operating as the Rock Hill Broom Works. From \$5000 to \$6000 will be invested in building and equipment, which has been purchased.

**Saluda—Brick Works.**—It is reported that R. H. Etheredge will establish brick works.

**St. Matthews—Water-works and Electric-light Plant.**—City has voted the \$30,000 bond issue recently mentioned for the construction of water-works and electric plant; H. A. Raysor, T. A. Amaker and T. H. Dreher, commissioners of public works.

**Williamston—Cotton Mill.**—The Williamston Mills will install 3584 spindles and 100 looms additional during the summer.

#### TENNESSEE.

**Cleveland—Manufacturing.**—Chartered: Cleveland Manufacturing Co., with \$10,000 capital stock, by J. T. Huffine, R. L. White, J. H. Smith and others.

**Cleveland—Cannery.**—Southern Packing Co. has been formed to establish fruit and vegetable cannery with an annual capacity of 20,000 to 40,000 cans. A brick warehouse 50x100 feet and various sheds will be erected. Stokely Bros. & Co. of Newport, Tenn., are interested.

**Crossville—Coal-mining, etc.**—East Tennessee Coal & Lumber Co. is the correct title of company previously reported as being organized with \$2,500,000 capital stock for the development of coal lands in Tennessee recently acquired by the Southern Contracting & Development Co., 41-43 Wall street, New York. Charter was obtained last week. Arrangements will be made for beginning mining operations shortly.

**Gallatin—Box and Barrel Factory, etc.**—Model Manufacturing Co. has been organized with W. B. Meek, president and general manager, to establish plant for manufacturing boxes, barrels and probably carriage and wagon parts. About \$3500 will be invested. Equipment has been purchased.

**Gleason—Water-works, etc.**—Gleason Water & Lighting Co. will install small pneumatic water outfit for a few houses only, which will be increased as needed. Electric lights will be installed at some time in the future. Company was mentioned recently as having secured franchise to construct water-works and electric-light plant.\*

**Harriman—Saw-mill.**—It is reported that the Little Lumber Co. has purchased 4000 acres of timber land near Harriman and will erect saw-mill.

**Jackson—School Desks, etc.**—Southern Seating & Cabinet Co., manufacturers of school desks and other hardwood specialties, has reorganized with Thomas Polk, president; J. H. Duke, vice-president; N. S. White, secretary-treasurer, and F. L. Ingersoll, general manager. Capital stock has been increased from \$35,000 to \$100,000.

**Knoxville—Sewerage System.**—City is reported as having plans and specifications prepared for storm-water sewers from Central street and Broadway to West Fifth avenue; W. C. Crozer, city engineer.

**Knoxville—Cotton Mill.**—Brookside Mills expects to add in the future 40,000 spindles and 1000 looms; now has 52,000 ring spindles, 8500 twister spindles and 1302 looms.

**Knoxville—Road Improvements.**—Jefferson county has let contract to Smith Bros. and Jenkins & Stokely of Dandridge, Tenn., for constructing 40 miles of macadam road and 80 miles of grading. About \$230,000 will be expended.

**Memphis—Saw and Planing Mill.**—Chartered: Sullivan-Blanks Lumber Co., with \$25,000 capital stock, by J. B. Sullivan, H. B. Blanks, A. H. Murray and others.

**Memphis—Concrete Culvert.**—Koehler Bros. & Franklin have contract at \$11,760 for constructing concrete culvert over the Bayou Gayoso, a distance of 1320 feet.

**Memphis—Grading.**—M. J. Roach and Ed Manigan have contract at 16 cents a yard for grading the parkway. It is estimated that about 60,000 yards of earth must be removed.

**Memphis—Street-paving.**—Board of Public Works has let contract to the Memphis Asphalt & Paving Co., Memphis, Tenn., for paving various streets with asphalt.

**Morristown—Woolen Mill.**—Morristown Woolen Knitting Mills has organized with A. B. Kesterson, president; R. H. Wright, vice-president, and J. B. McCord, treasurer; capital stock \$100,000. The company will install 12 knitting machines and a three-set mill, making its own yarn. (This enterprise lately mentioned.)

**Nashville—Grain Elevator.**—Nashville Terminal Co. has let contract to Geo. B. Swift & Co., Chicago, Ill., for the erection of 500,000-bushel grain elevator previously referred to.

**Stantonville—Electric Plant.**—Stantonville Telephone Co. has amended charter to establish plant for manufacturing electricity for telephone purposes, and increased capital stock from \$10,000 to \$450,000.

**Tellico Plains—Tannic-acid Plant.**—Tellico Extract Co. will consume the extract timber from the Tellico River Lumber Co.'s operations, referred to in this column, and will probably double its tannic-acid plant. It is reported that the contract calls for a minimum daily delivery of 60 cords of timber; present capacity 90 barrels of acid.

**Tellico Plains—Copper Mines.**—C. F. Herford is reported as developing copper properties on the Tellico river. It is stated he has expended more than \$100,000, and contemplates another expenditure to that extent for further developments.

**Tellico Plains—Saw-mill and Timber Development.**—Tellico River Lumber Co., referred to last week, previously purchased 50,000 acres of timber land, and this is the property being developed. A railway is part of the enterprise, and its terminal facilities and yards and the company's mills will be located on a tract of 14 acres at Tellico Plains. It is proposed to erect a double band and resaw mill 168x70 feet, boiler-house 40x40 feet, planing mill 80x100 feet and dry-kiln 20x150 feet. White pine, chestnut, cherry, ash, oak, poplar and hemlock will be manufactured; capacity 150,000 feet in 10 hours. S. A. Smith is president; Lee Stout, vice-president and general manager, and W. D. Nutter, assistant secretary and treasurer.

**Watauga—Extract Factory.**—Incorporated: Watauga Extract Co., with \$150,000 capital stock, by W. P. Long, R. A. Long, W. P. Dungan and others.

#### TEXAS.

**Amarillo—Gas Plant.**—Amarillo Gas Co., reported incorporated last week with \$50,000 capital stock, will establish plant to cost between \$35,000 and \$50,000 and have a daily capacity of 50,000 to 75,000 cubic feet of gas. Neither engineer nor architect have been selected. J. C. Storm is president and manager; F. J. Storm, vice-president; J. S. Chestnut, secretary-treasurer.\*

**Ballinger—Light Company.**—Incorporated: Consumers' Light Co., with \$20,000 capital stock, by Tom Ward, J. O. Wilmett and W. A. Nosman.

**Bay City—Mining and Manufacturing.**—Bay City Harvester Co. has incorporated with \$2500 capital stock to engage in mining and manufacturing; incorporators, Thos. Haynes, S. S. Moore and B. L. Vaughn.

**Beaumont—Publishing.**—Chartered: Labor

News Publishing Co., with \$3000 capital stock, by Theodore Krogh, O. R. Morrison and Max Andrew.

**Beaumont—Saw-mill.**—A. D. Carroll and associates have secured site on the Neches river, and arrangements are being made for the erection of saw-mill with a daily capacity of 20,000 feet. Electricity will be used as motive power.

**Brownwood—Gas and Electric Plant.**—Brownwood Gas & Electric Co. has been incorporated with \$80,000 capital stock by S. P. Coggin, B. S. Boysen, R. B. Rogers and others.

**Brownwood—Mattress and Pillow Factory.**—Empire Furniture Co. will rebuild mattress and pillow factory recently burned. A building 30x75 feet will be erected.\*

**Carthage—Brick Works.**—Carthage Brick Co. has been incorporated with \$10,000 capital stock by T. J. Frazier, Jasper Collins and J. W. Collins.

**Dallas—Cement Plant.**—It is reported that H. P. Elwell, representing Eastern capitalists, is arranging for the establishment of \$350,000 cement plant and has purchased machinery. It is stated that John A. Sinclair will be local representative.

**Del Rio—Rubber Factory.**—Reports state that a syndicate of New York (N. Y.) capitalists headed by C. G. Woodruff contemplates erecting a gayule rubber factory.

**Falfurrias—Publishing.**—Incorporated: Facts Publishing Co., with \$3000 capital stock, by Ed Clasater, R. M. Curtis and Richard C. Miller.

**Fort Worth—Railroad Repair Shops, etc.**—It is reported that the St. Louis & San Francisco Railroad will shortly let contract for the erection of proposed eight-stall brick round-house 40x50 feet, 10-pocket coal chute, two cinder pits, foreman's combination office and storeroom 40x100 feet, of brick, brick oilhouse, car repairer's house, sand dryhouses, 70 feet turntable and one water tank; W. B. Drake, assistant general manager, St. Louis, Mo.

**Fort Worth—Lumber Plant.**—Lovely Lumber & Manufacturing Co. has been incorporated with \$10,000 capital stock by A. C. Ford, W. B. Ward, Jr., and T. C. Tabor; main office, Houston, Texas.

**Gilmer—Dry-kiln.**—Commercial Lumber Co. will erect hot-air dry-kiln, 30x130 feet, replacing kiln recently reported burned. About \$5000 will be invested; contracts awarded.

**Hempstead—Bridge.**—E. P. Alsbury, engineer, Houston, Texas, it is reported, has submitted an offer to build a bridge across the Brazos river for \$8500 and will probably receive contract.

**Hillsboro—Cotton Mill.**—Hillsboro Cotton Mills expects to double equipment next fall; now has 2500 spindles and 80 looms.

**Hillsboro—Telephone System.**—City will let franchise to the Texas Telephone Co. for constructing telephone system.

**Houston—Lumber Plant.**—Southern Texas Lumber Co. has increased capital stock from \$200,000 to \$400,000.

**Houston—Lumber Company.**—Ulmer-Oliphant Lumber Co. has been incorporated with \$50,000 capital stock by F. S. Ulmer, C. D. Oliphant and O. C. Ulmer.

**Houston—Showcase Factory.**—Chartered: Bender-Brown Showcase Co., with \$10,000 capital stock, by John M. Bender, Bernard Brown and George N. Torrey. Site has been secured on which to locate plant and machinery purchased.

**Houston—Oil and Gas Wells.**—Pickett-Henry Oil Co. has been incorporated with \$5000 capital stock. E. B. Pickett is president; J. L. Henry, vice-president, and W. L. Lane, secretary-treasurer.

**Mineola—Pickle and Canning Factory.**—Texas Pickle & Canning Co., recently reported incorporated with \$10,000 capital stock, will operate pickle and canning factory. A building 42x92 feet will be erected and about \$5000 will be invested in buildings and equipment; A. Patton, president, and T. A. Morrison, manager.

**Nacogdoches—Saw-mill.**—Stern Lumber Co. has been organized by A. Y. Donegan, E. M. Dotson and R. W. Persons to erect a saw-mill with a daily capacity of 20,000 feet.

**San Antonio—Cement-block Factory.**—It is reported that the Harris Lumber Co. of Seguin, Texas, will establish plant for manufacturing hollow cement building blocks.

**San Antonio—Cannery.**—San Antonio Canning Co. has been formed with \$20,000 capital stock for canning fruits, vegetables and Mexican dishes. About \$12,000 will be expended in buildings and equipment.

**San Augustine—Lumber Mill.**—B. S. Ferguson, M. L. Ferguson and B. E. Rawls have incorporated the Ferguson Manufacturing Co. with \$10,000 capital stock.

**Seguin—Cement-block Factory.**—Harris



Lumber Co. is reported as considering the establishment of plant for the manufacture of hollow cement building blocks.

Spring-Saw and Planing Mill.—E. C. Barrett of Huntsville, Texas, it is reported, will establish saw and planing mill; capacity 30,000 feet daily.

Snyder-Cement Construction.—B. F. Womack, W. S. Boling, A. C. Wilmeth and others have incorporated the Cement Construction Co. with \$10,000 capital stock.

Taylor-Cotton Gin.—Barney Cunningham will erect cotton gin; daily capacity 40 bales.

Wallisville—Irrigation and Rice Plant.—Old River Rice Irrigation Co., Dr. T. W. Shearer, president and general manager, is installing machinery for increasing the capacity of irrigation plant. The present 30-inch pump will be increased to 36 inches, giving a capacity of 15,000 gallons per minute. The acreage of land to be irrigated will be increased during the year to 9000 acres and the plant will have an output of 100,000 sacks of rice.

Weatherford—Telephone System.—G. A. Holland, R. S. Lowe, W. D. Carter, C. C. Littleton, J. T. Cotton and others have incorporated the Home Telephone Co. with \$50,000 capital stock.

#### VIRGINIA.

Alexandria—Land Improvement.—Edwards Land & Building Co. has been incorporated with an authorized capital stock of \$100,000. Scott Nesbit is president; Frank E. Rapp, secretary, and B. F. Edwards, treasurer, all of Washington, D. C.

Alexandria—Brick Works.—Patuxent Brick Co. has been incorporated with an authorized capital stock of \$100,000. Charles Childs is president; F. J. Coleman, secretary, and A. J. Curtis, treasurer, all of Washington, D. C.

Bowling Green—Telephone System.—Caroline County Telephone Co. has been organized with \$10,000 capital stock to build 100 or more miles of telephone lines throughout the county. C. T. Smith is president; W. E. Ennis, vice-president; Norman T. McManaway, secretary, and L. E. Martin, treasurer. Mr. McManaway was reported last month as organizing company for this purpose.\*

Bristol—Extract Factory.—Reports state that the Smethport Extract Co. will double its plant's present capacity of 30 to 40 barrels daily.

Culpeper—Hardware, etc.—Culpeper Hardware & Manufacturing Co. has been incorporated with \$10,000 capital stock. E. A. Walter is president, and John S. Covington, secretary-treasurer.

Emporia—Cotton Mill.—Ashby Cotton Mill Co. contemplates doubling its capacity; 5500 spindles now in position.

Gloucester Point—Cement-block Factory.—Cattlett Bros. of Gloucester C. H., Va., have secured site on which to erect plant for the manufacture of cement building blocks.

Hampton—Light and Heating Plant.—Chartered: Public Service Corporation of Virginia, with an authorized capital stock of \$300,000, to produce and distribute light, heat, power and compressed air. J. W. Rowe is president; H. F. Elam, secretary, and S. C. Rees, treasurer.

Lynchburg—Cable Line.—Isaac D. Smead & Co., Cincinnati, Ohio, are engineers in charge of constructing cable line for the Lynchburg Cable Line Co., to be used in assisting loaded wagons up hill; capacity three wagons a minutes.

Manchester—Filtration Plant.—City has completed arrangements for constructing proposed gravity filtration plant, and bids will be received until May 15; Matthew Morton, secretary.\*

Newport News—Reservoir.—West Richardson has contract to construct proposed reservoir for the Newport News Light & Water Co.; the work to include a 1,500,000-gallon concrete-covered reservoir and a 3,000,000-gallon pumping station at Newport News and a 4,000,000-gallon filter plant at main station, Lee Hall, Va. About \$100,000 will be expended. A. Wagner is engineer in charge.\*

Norfolk—Steam Laundry.—Norfolk Steam Laundry, Consolvo & Cheshire, proprietors, 355 Main street, have secured site on which to erect building 68x232 feet. About \$75,000 will be expended in buildings and equipment. Machinery has been purchased; Neff & Thompson, architects.

Norfolk—Steel Bridge.—Tidewater Railway Co., mentioned recently as to construct a bridge over New river, will build a steel bridge 2155 feet long, consisting of 1475 feet of viaduct in 30 and 60-foot spans supported by steel bents resting on concrete pedestals; average height of viaduct, steel portion, 83 feet; average height of masonry pedestals, 10 feet; 690 feet of deck truss bridge in five spans of 136 feet, each resting on concrete

piers the height of which is 96 feet above bottom of river; depth of deck trusses 31 feet; total height of bridge over river 127 feet. H. Fernstrom is chief engineer, and Raymond Du Puy, general manager.

Petersburg—Cotton Mill.—Virginia Consolidated Milling Co. contemplates installing new steam engines and water-wheels.

Petersburg—Lumber Company.—Petersburg Lumber Co. has been incorporated with an authorized capital stock of \$10,000. R. O. Egerton is president and treasurer; D. M. Brown, secretary, and H. C. Southall, general manager.

Pulaski—Ice Plant.—T. R. Corder will install ice plant of three to five tons daily capacity, and later contemplates adding cold-storage plant.\*

Raven—Coal Mines.—Raven Red Ash Coal Co. has applied for a charter with \$40,000 capital stock to mine coal near Raven. It is proposed to install the latest-improved electric mining machinery for an output of from 800 to 1200 tons daily. From 50 to 100 operatives' houses will be erected. M. R. McCorkle, Richlands, Va., is manager; J. N. Harman, president, and J. N. Harman, Jr., secretary-treasurer, both of Tazewell, Va.

Richmond—Concrete-block Factory.—Virginia Granolithic Building Block Co., recently reported incorporated with \$10,000 capital stock, will manufacture concrete building blocks; daily capacity to be 200 cubic feet. A frame building, 30x60 feet, will be erected; machinery has been purchased. S. S. Start is president; M. B. Start, vice-president, and H. B. Start, secretary-treasurer; office, 1321 West Main street.\*

Richmond—Real Estate.—Chartered: American Realty Corporation, with an authorized capital stock of \$100,000. D. A. Ritchie is president; P. F. Williams, secretary-treasurer.

Richmond—Foundry.—Richmond Foundry & Manufacturing Co., previously reported as having secured site on which to locate plant, has begun construction work. The foundry will be built of brick and steel, 320x50 feet wide, side walls of building glazed from end to end, and the roof will have a monitor, also glazed. Provision has been made for three cupolas. An industrial railway will bring the iron and coke to the cupolas, and a similar track will carry castings from foundry to cleaning and finishing departments. A three-story building, 80x170 feet, will be erected for the warehouse and shipping department. Additional departments will be for the making of sand cores, cleaning, grinding and nickel-plating. The company will remove its present equipment from plant now being operated, but additional cupolas, blowers, grinders, machine tools, etc., will be installed; Noland & Baskerville, architects. Contracts have all been let; Arthur Scrivenor, president and engineer in charge.

Richmond—Turbine Water-wheels, etc.—James Lee Shelton, Shafer Building, is organizing company for the manufacture of turbine water-wheels and power-transmission machinery. Construction work will shortly begin.\*

Roanoke—Printing Plant.—Stone Printing & Manufacturing Co. has let contract to E. Tatterson for two-story brick and steel factory building 120x143 feet, for which H. H. Huggins, 705 Terry Building, was previously reported as preparing plans.

Roanoke—Cotton Mill.—The Roanoke Cotton Mill Co. contemplates doubling its capacity; present equipment 6032 spindles.

Shenandoah—Machine Shop, etc.—Shenandoah Machine & Plumbing Co. has been formed to engage in a general repair and plumbing business. A foundry and blacksmith shop is also being erected.\*

South Boston—Distillery.—Poplar Creek Distilling Co. has been incorporated with an authorized capital stock of \$5000. G. T. Norwood is president, and J. C. Childrey, secretary-treasurer.

Suffolk—Gas Plant.—Suffolk Gas Co., reported last week as organized with \$20,000 capital stock to take over the Home Acetylene Gas Co., will build four to five miles additional mains. No new buildings will be erected; capacity 10,000 acetylene lights. Arthur Woolford is president; E. L. Folk, vice-president, and W. C. Harrell, secretary-treasurer; A. A. Umholtz, Lynchburg, Va., engineer in charge.\*

Sugar Grove—Lead Mines.—Chamberlin Mineral Co., 606 F street N. W., Washington, D. C., is developing lead properties in Rye valley, recently mentioned. A 100-ton concentrating mill will be erected. From \$12,000 to \$15,000 will be invested.\*

West Esmond—Flour Mill.—Green Mountain Milling Co., it is reported, will rebuild flour mill recently burned.

Whaleyville—Timber Development.—J. M. Wolford, 108 Plume street, Norfolk, Va., has

purchased 1844 acres of timber land containing about 8,000,000 feet of pine timber which will be developed. A mill with a capacity of 20,000 feet daily, with lath machine, etc., will be erected.\*

Williamsburg—Land Improvement.—Colonial Extension Co., recently reported incorporated to develop as residence site Tazewell Hall property, has engaged A. Braxton Edmonds, civil engineer, 222 31st street, Newport News, Va., to make surveys and lay out the property into streets, building lots, etc.

#### WEST VIRGINIA.

Benwood—Brewery.—Hutzerman & Kramer have contract to erect brewery for the Benwood Brewing Co., recently mentioned. The building is to be 234x200 feet and equipped for an annual capacity of 35,000 barrels.

Charleston—Steel Plant.—Baldwin Steel Co., main office 133 Reade street, New York, mentioned in March as having purchased 12 acres of land on which to locate plant for the manufacture of high-grade crucible steel, has completed plans for the erection of a main building 120x400 feet and power-house 40x80 feet. About 1000 horse-power will be used in plant, probably electric. Two rolling mills, a 10-inch mill, a 13-inch mill, two crucible steel furnaces and 11 heating and annealing furnaces will also be installed.

Charleston—Coal-mining.—Incorporated: Devils Fork Fuel Co., with \$10,000 capital stock, by C. C. Stone, A. W. McDonald, V. L. Black of Charleston, L. Cohenom and H. T. Irvin of Columbus, Ohio.

Charleston—Publishing.—George V. McClintock, W. L. Mathews, J. N. Carnes and J. Wilcox Adams have incorporated the News-Mall Company with \$75,000 capital stock.

Charleston—Coal Mines.—New River Collieries Co. has been incorporated with \$10,000,000 capital stock. This company was previously reported organized with C. J. Wit tenberg, 11 Broadway, New York, N. Y., president, for the development of approximately 30,000 acres of coal land which it had acquired.

Morgantown—Bridge Construction.—Monongalia county will vote May 12 on \$85,000 bond issue for constructing bridges. Address County Clerk.

Parkersburg—Roundhouse, Machine Shop, etc.—Baltimore & Ohio Railroad will expend about \$150,000 in improvements; to include enlargement of freight-yard to more than double its present capacity, erection of roundhouse, machine shop and oilhouse, and the building of a cinder pit. Bids for the work will shortly be asked; D. D. Carothers, Baltimore, Md., chief engineer.

Parkersburg—Novelty Works.—Chartered: Parkersburg Novelty Co., with \$25,000 capital stock, by A. C. Davis, J. F. Norris, W. E. Ely and others.

Sutton—Electric-light Plant.—Chartered: Development Industrial Co., with \$10,000 capital stock, by W. E. Raymond, Fred L. Fox, John Newton, Charles J. Hyer and Kure A. Holy, to establish electric-light plant.

Wheeling—Water-works Improvements.—City is arranging for enlarging and improving water-works; C. B. Brooks, city engineer.

Wheeling—Dyeing and Cleaning Works.—B. Montigel has let contract for the erection of dyeing and cleaning plant previously reported to Louis Hartong & Sons; plans by Joseph Leiner & Sons Company; building to be three stories, 25x50 feet; ordinary construction; heated by natural gas; combination gas and electric fixtures; cost \$6000.\*

#### INDIAN TERRITORY.

Chickasha—Electric-power Plant.—City Railway Co. is making improvements to power plant and will erect brick addition 40x77.5 feet, equipping for a capacity of 300 kilowatts. About \$30,000 will be invested. E. E. Colby is engineer in charge, and E. T. Sykes of Minneapolis, Minn., architect.

Dewey—Glass Works.—Bartlesville Glass Co. of Bartlesville, I. T., is reported as to build glass plant.

Fort Gibson—Development Company.—Fort Gibson Development Co. has been incorporated with \$200,000 capital stock by L. J. Martin, W. P. Moore and B. F. Rice.

Lindsay—Electric-light Plant.—City is considering the installation of electric-light plant. Address The Mayor.

Sulphur—Ice Plant.—L. G. Leibman of Hobart, O. T., it is reported, has purchased site on which to erect a 20-ton ice plant.

#### OKLAHOMA TERRITORY.

Altus—Water-works and Electric-light Plant.—McQuatters Plumbing & Machine Co., Hillsboro, Texas, has contract for the construction of water-works and electric-light plant, recently mentioned; cost \$23,000.

Cold Springs—Mining.—Incorporated: Lone Star-Wichita Mountain Mining Co., with \$2000 capital stock, by C. D. Parsons, W. N. Habbell and George W. Ray, all of Roosevelt, O. T.

Granite-Oil Wells.—Chartered: Myers Oil Co., with \$500,000 capital stock, by C. H. Myers, P. J. Stacey, C. E. Bruell and others.

Guthrie—Medicine Company.—International Mineral Remedy Co. of Guthrie and Kansas City, Mo., has been incorporated with \$1,000,000 capital stock by W. W. Rucke, E. E. Hull of Guthrie, William G. Grant of Pawnee, O. T., and associates.

Lawton—Milling, etc.—S. L. France, P. J. France of Lawton and Alfred Wishey of Houston, Texas, have incorporated the National Milling & Townsite Co. with \$2,000,000 capital stock.

Lawton—Manufacturing, etc.—Chartered: Western Manufacturing & Building Co., with \$250,000 capital stock, by A. E. Hammonds and associates.

Mangum—Telephone System.—Mangum Telephone Co. has been incorporated with \$100,000 capital stock by D. D. Taylor, D. H. Wright and others.

Noble—Telephone System.—A. L. Lewis, A. J. Burkett, W. E. Davis and associates have incorporated the Farmers' Telephone Co. with \$1000 capital stock.

Oklahoma City—Stone Works.—Oklahoma Oolite Stone Co. has increased capital stock from \$100,000 to \$1,000,000.

Shawnee—Manufacturing.—Incorporated: Acme Manufacturing Co., with \$10,000 capital stock, by J. H. Macey, Jr., Charles A. Bell and S. M. Martin.

Walter—Hardware.—Block-Fay Hardware Co. has been incorporated with \$10,000 capital stock by Howard S. Fay, Rose B. Fay and associates.

#### BURNED.

Augusta, Ga.—Buckeye Cotton Oil Co.'s warehouse; loss \$25,000.

Bellevue, Fla.—The Slaughter House; loss \$5000.

Concord, N. C.—Joseph A. Thompson's saw-mill.

Dallas, Texas—Building owned by C. A. Keating; loss \$20,000.

Davy, W. Va.—Blackstone Coal & Coke Co.'s coal tipples; loss \$10,000.

Freeport, Fla.—J. J. Macaskill & Co.'s saw-mill; loss \$75,000.

Hackley, La.—W. E. Alford & Co.'s store building; loss \$10,000.

Hanover, Va.—W. C. Parkinson's dwelling; loss \$10,000.

Harrisville, W. Va.—National Hotel, C. F. Corbin, proprietor; First National Bank, A. J. Wilson, cashier.

Jackson, Tenn.—Consumers' Ice Co.'s plant; loss \$40,000.

Jacksonville, Fla.—Municipal crematory. Address City Engineer.

Jasper, Fla.—Jasper Ginning Co.'s cotton gin and grist mill; loss \$10,000.

Logan, W. Va.—Logan Carriage Co.'s plant damaged \$5000.

Mt. Juliet, Tenn.—Mt. Juliet Milling Co.'s flour mill; loss \$6000.

Norfolk, Va.—Norfolk Protestant Hospital; loss \$100,000.

Ocala, Ga.—Ensign-Oskamp Company's dry-kilns; loss \$15,000.

Pennsboro, W. Va.—Pennsboro Grocery Co.'s warehouse; loss \$40,000.

Penola, Va.—L. D. George's planing mill; loss \$10,000.

Russellville, Ark.—Cotton gin owned by W. P. Platt and R. M. Newport; loss \$6000.

Sweetwater, Texas.—Sweetwater Cotton Oil Co.'s seedhouse; loss \$10,000.

#### Structures to Resist Earthquake.

The recent disaster in San Francisco will doubtless have its effect upon methods of constructing buildings in those sections of the country where it is possible that earthquakes may occur in the future. On the day after the California earthquake the builders of a large power station in Seattle, Wash., decided to change from brick and structural steel to reinforced concrete. It was decided by the engineers in charge that reinforced concrete will combine the elasticity of steel with the solidity of the adobe structures so commonly found in earthquake countries. The Seattle power station will be concrete throughout, even to the girders which support the 50-ton crane and the trusses of 60-foot span which carry the roof. It is interesting to know that this building is to be erected by Frank B. Gilbreth of Boston and New York.

capital stock by W. M. King, T. F. Bailey and W. A. Hendricks.

**Saxapahaw-Cotton Mill.**—The White-Williamson Company, reported incorporated last week with a capital stock of \$200,000, has a mill of 5000 spindles and 200 looms. It expects to add 2500 spindles and to replace 22 old cards with new apparatus; will also add intermediates, drawing and fine speeders and spoolers.

**Shelby-Cotton Mill.**—Shelby Cotton Mills contemplates adding six cards and 1040 spindles in order to balance equipment; now has 7488 spindles and 250 looms.

**Spencer-Sewer System.**—City has awarded contract to L. B. Brickenstine for the construction of proposed sewer system, to cost approximately \$18,000.

**Spray-Cotton Mill.**—German-American Company contemplates increasing 12,000 spindles during the next six months; now has 22,000 spindles and 300 looms.

**Statesville-Cotton Mill.**—Bloomfield Manufacturing Co. will double capacity of its mill; present equipment 4700 spindles.

**Statesville-Knitting Mill.**—Bradford Knitting Mills, reported incorporated last week with a capital stock of \$100,000, has elected Eugene Morrison, president; C. S. Tomlin, vice-president, and J. A. Bradford, secretary-treasurer. Details of plant will now be considered.

**Weldon-Silk Mill.**—The Chockoyette Mills, reported incorporated in February with a capital stock of \$50,000, is now installing 50 looms and other machinery in the building which was previously secured. Silks and satin linings will be manufactured. M. W. Ransom is president.

**Wilmington-Steel Bridge.**—Reports state that the Atlantic Coast Line Railroad is arranging for the construction of proposed modern double-track steel bridge across Smith creek. E. B. Pleasants is chief engineer.

**Winston-Salem-Granite Quarry, etc.**—Consolidated Granite Co., mentioned recently as incorporated with \$150,000 capital stock to take over the business of C. A. McGalliard & Son, has completed organization with Wm. A. Blair, president; Lachlan McGalliard, vice-president; G. W. Patterson, secretary-treasurer, and C. A. McGalliard, superintendent. It is proposed to improve plant and operate on an enlarged scale.\*

**Winston-Salem-Gas Plant.**—Williams & Sinclair of Oshkosh, Wis., it is reported, have purchased the plant of the Winston-Salem Gas & Lighting Co.

**Worth-Cotton Mill.**—Harden Manufacturing Co. is building a rock dam and installing some new cards. It wants to put in looms later.

#### SOUTH CAROLINA.

**Anderson-Cotton Mill.**—H. C. Townsend expects to double his cotton mill; now has 2280 ring spindles and uses electric power. No machinery has been purchased.\*

**Batesburg-Concrete-stone Company.**—Chartered: Concrete Stone Contracting Co., with \$3000 capital stock, by W. J. McCartha and M. E. Rentland.

**Bishopville-Water-works.**—Town has voted affirmatively the \$5000 bond issue previously reported for extending water-works. Address Town Clerk.

**Blaney-Kaolin-mining.**—Southern Kaolin & Aluminum Co., reported incorporated last week under Columbia, S. C., with \$100,000 capital stock, has completed organization with E. O. De Pass of Columbia, president; Wm. S. Leib, vice-president; Theodore Loder, secretary, both of Philadelphia, Pa., and E. O. De Pass of Columbia, treasurer. It is proposed to mine and ship kaolin and later establish plant for manufacturing aluminum.

**Charleston-Fertilizer Factory.**—Planters' Fertilizer & Phosphate Co., reported incorporated last month with \$350,000 capital stock to establish plant with a capacity of 10,000 tons, has completed organization with W. H. Welch, president; George A. Wagoner, vice-president, and Julius D. Koster, secretary-treasurer.

**Cluton-Cotton Mill.**—Lydia Cotton Mill will add 10,000 spindles and 150 looms during the next year; now has 20,000 spindles and 450 looms.

**Clinton-Water-works and Electric-light Plant.**—City will receive bids until May 29 for the construction of water-works and electric-light plant; Charles C. Wilson, consulting engineer, 1302 Main street, Columbia, S. C.\*

**Clover-Cotton Mill.**—Clover Cotton Manufacturing Co. will add 6000 spindles, with necessary preparatory machinery; now has 15,000 spindles.

**Columbia-Land Improvement.**—Shandon Annex Co. has been organized by Julius H. Walker, J. Sumter Moore and Bruce W. Rave-

nel for the development as suburban site of 90 acres of land recently purchased.

**Greenville-Cotton Mill.**—Vardry Cotton Mills, reported incorporated last week with a capital stock of \$75,000, has building and some machinery. It has water-power developed, wheels installed and boilers, and will probably install a small supplementary engine. The company's building has a capacity of 5000 spindles, and these will be purchased, besides dyeing plant. L. M. McBea will be president-treasurer, and J. W. Roberts, superintendent.\*

**Greer-Hardware.**—Thompson Hardware Co. has been incorporated with \$10,000 capital stock. W. M. Thompson is president.

**Hamer-Cotton Mill.**—Hamer Cotton Mill will add 5000 spindles to present equipment of 7168 spindles. Company has one-story brick building, 80x300 feet, completed and ready for machinery; heating and sprinkler systems, additional boiler, shafting pulleys, etc., will be installed, and engine will be compounded.

**Irene-Cotton Mill.**—Saxe Gotha Mills intends to double the capacity of its spinning-room; now has 5000 spindles and 242 looms.

**Jefferson-Printing Plant.**—Chartered: Jefferson Printing & Publishing Co., with F. M. Welsh, president.

**Mars Bluff-Lumber Company.**—W. L. Rankin Lumber Co. has been incorporated with \$50,000 capital stock by W. H. Haigh and A. A. McDonald.

**Pickens-Cotton Mill.**—Pickens Cotton Mills, reported last week as to be organized with capital stock of \$250,000, proposes to install 15,000 spindles and complementary machinery for manufacturing cloth. The company has not permanently organized, but will probably effect organization soon. W. M. Hagood of Easley, S. C., will be president and treasurer.

**Rock Hill-Cotton Mill.**—Highland Park Manufacturing Co. will add 8000 spindles, contract having been practically awarded. No new construction required; present equipment 8192 spindles and 736 looms.

**Rock Hill-Cotton Mill.**—Victoria Cotton Mills will install 2440 new spindles; now has 9216 spindles and 200 looms.

**Rock Hill-Broom Factory.**—A. E. Smith and J. R. D. Smith will erect two-story building, 40x48 feet, and equip for a daily output of 100 dozen brooms, operating as the Rock Hill Broom Works. From \$5000 to \$6000 will be invested in building and equipment, which has been purchased.

**Saluda-Brick Works.**—It is reported that R. H. Etheredge will establish brick works.

**St. Matthews-Water-works and Electric-light Plant.**—City has voted the \$30,000 bond issue recently mentioned for the construction of water-works and electric plant; H. A. Raysor, T. A. Amaker and T. H. Dreher, commissioners of public works.

**Williamston-Cotton Mill.**—The Williamston Mills will install 3584 spindles and 100 looms additional during the summer.

#### TENNESSEE.

**Cleveland-Manufacturing.**—Chartered: Cleveland Manufacturing Co., with \$10,000 capital stock, by J. T. Huffine, R. L. White, J. H. Smith and others.

**Cleveland-Cannery.**—Southern Packing Co. has been formed to establish fruit and vegetable cannery with an annual capacity of 20,000 to 40,000 cans. A brick warehouse 50x100 feet and various sheds will be erected. Stokely Bros. & Co. of Newport, Tenn., are interested.

**Crossville-Coal-mining, etc.**—East Tennessee Coal & Lumber Co. is the correct title of company previously reported as being organized with \$2,500,000 capital stock for the development of coal lands in Tennessee recently acquired by the Southern Contracting & Development Co., 41-43 Wall street, New York. Charter was obtained last week. Arrangements will be made for beginning mining operations shortly.

**Gallatin-Box and Barrel Factory, etc.**—Model Manufacturing Co. has been organized with W. B. Meek, president and general manager, to establish plant for manufacturing boxes, barrels and probably carriage and wagon parts. About \$2500 will be invested. Equipment has been purchased.

**Gleason-Water-works, etc.**—Gleason Water & Lighting Co. will install small pneumatic water outfit for a few houses only, which will be increased as needed. Electric lights will be installed at some time in the future. Company was mentioned recently as having secured franchise to construct water-works and electric-light plant.\*

**Harriman-Saw-mill.**—It is reported that the Little Lumber Co. has purchased 4000 acres of timber land near Harriman and will erect saw-mill.

**Jackson-School Desks, etc.**—Southern Seating & Cabinet Co., manufacturers of school desks and other hardwood specialties, has reorganized with Thomas Polk, president; J. H. Duke, vice-president; N. S. White, secretary-treasurer, and F. L. Ingersoll, general manager. Capital stock has been increased from \$35,000 to \$100,000.

**Knoxville-Sewerage System.**—City is reported as having plans and specifications prepared for storm-water sewers from Central street and Broadway to West Fifth avenue; W. C. Crozer, city engineer.

**Knoxville-Cotton Mill.**—Brookside Mills expects to add in the future 40,000 spindles and 1000 looms; now has 52,000 ring spindles, 8500 twister spindles and 1302 looms.

**Knoxville-Road Improvements.**—Jefferson county has let contract to Smith Bros. and Jenkins & Stokely of Dandridge, Tenn., for constructing 40 miles of macadam road and 50 miles of grading. About \$230,000 will be expended.

**Memphis-Saw and Planing Mill.**—Chartered: Sullivan-Blanks Lumber Co., with \$25,000 capital stock, by J. B. Sullivan, H. B. Blanks, A. H. Murray and others.

**Memphis-Concrete Culvert.**—Koehler Bros. & Franklin have contract at \$11,760 for constructing concrete culvert over the Bayou Gayoso, a distance of 1320 feet.

**Memphis-Grading.**—M. J. Roach and Ed Manigan have contract at 16 cents a yard for grading the parkway. It is estimated that about 60,000 yards of earth must be removed.

**Memphis-Street-paving.**—Board of Public Works has let contract to the Memphis Asphalt & Paving Co., Memphis, Tenn., for paving various streets with asphalt.

**Morristown-Woolen Mill.**—Morristown Woolen Knitting Mills has organized with A. B. Kesterson, president; R. H. Wright, vice-president, and J. B. McCord, treasurer; capital stock \$100,000. The company will install 12 knitting machines and a three-set mill, making its own yarn. (This enterprise lately mentioned.)

**Nashville-Grain Elevator.**—Nashville Terminal Co. has let contract to Geo. B. Swift & Co., Chicago, Ill., for the erection of 500,000-bushel grain elevator previously referred to.

**Stantonville-Electric Plant.**—Stantonville Telephone Co. has amended charter to establish plant for manufacturing electricity for telephone purposes, and increased capital stock from \$10,000 to \$450,000.

**Tellico Plains-Tannic-acid Plant.**—Tellico Extract Co. will consume the extract timber from the Tellico River Lumber Co.'s operations, referred to in this column, and will probably double its tannic-acid plant. It is reported that the contract calls for a minimum daily delivery of 60 cords of timber; present capacity 90 barrels of acid.

**Tellico Plains-Copper Mines.**—C. F. Herford is reported as developing copper properties on the Tellico river. It is stated he has expended more than \$100,000, and contemplates another expenditure to that extent for further developments.

**Tellico Plains-Saw-mill and Timber Development.**—Tellico River Lumber Co., referred to last week, previously purchased 50,000 acres of timber land, and this is the property being developed. A railway is part of the enterprise, and its terminal facilities and yards and the company's mills will be located on a tract of 14 acres at Tellico Plains. It is proposed to erect a double hand and resaw mill 168x70 feet, boiler-house 40x40 feet, planing mill 80x100 feet and dry-kiln 20x150 feet. White pine, chestnut, cherry, ash, oak, poplar and hemlock will be manufactured; capacity 150,000 feet in 10 hours. S. A. Smith is president; Lee Stout, vice-president and general manager, and W. D. Nutter, assistant secretary and treasurer.

**Watauga-Extract Factory.**—Incorporated: Watauga Extract Co., with \$150,000 capital stock, by W. P. Long, R. A. Long, W. P. Dungan and others.

#### TEXAS.

**Amarillo-Gas Plant.**—Amarillo Gas Co., reported incorporated last week with \$50,000 capital stock, will establish plant to cost between \$35,000 and \$50,000 and have a daily capacity of 50,000 to 75,000 cubic feet of gas. Neither engineer nor architect have been selected. J. C. Storm is president and manager; F. J. Storm, vice-president; J. S. Chestnut, secretary-treasurer.\*

**Rallinger-Light Company.**—Incorporated: Consumers' Light Co., with \$30,000 capital stock, by Tom Ward, J. O. Wilmeth and W. A. Nosman.

**Bay City-Mining and Manufacturing.**—Bay City Harvester Co. has incorporated with \$2500 capital stock to engage in mining and manufacturing; incorporators, Thos. Haynes, S. S. Moore and R. L. Vaughn.

**Beaumont-Publishing.**—Chartered: Labor

News Publishing Co., with \$3000 capital stock, by Theodore Krogh, O. R. Morrison and Max Andrew.

**Beaumont-Saw-mill.**—A. D. Carroll and associates have secured site on the Neches river, and arrangements are being made for the erection of saw-mill with a daily capacity of 20,000 feet. Electricity will be used as motive power.

**Brownwood-Gas and Electric Plant.**—Brownwood Gas & Electric Co. has been incorporated with \$80,000 capital stock by S. P. Coggin, R. S. Boysen, R. B. Rogers and others.

**Brownwood-Mattress and Pillow Factory.**—Empire Furniture Co. will rebuild mattress and pillow factory recently burned. A building 30x75 feet will be erected.\*

**Carthage-Brick Works.**—Carthage Brick Co. has been incorporated with \$10,000 capital stock by T. J. Frazier, Jasper Collins and J. W. Collins.

**Dallas-Cement Plant.**—It is reported that H. P. Elwell, representing Eastern capitalists, is arranging for the establishment of \$500,000 cement plant and has purchased machinery. It is stated that John A. Sinclair will be local representative.

**Del Rio-Rubber Factory.**—Reports state that a syndicate of New York (N. Y.) capitalists headed by C. G. Woodruff contemplates erecting a gayule rubber factory.

**Falfurrias-Publishing.**—Incorporated: Facts Publishing Co., with \$3000 capital stock, by Ed Claserter, R. M. Curtis and Richard C. Miller.

**Fort Worth-Railroad Repair Shops, etc.**—It is reported that the St. Louis & San Francisco Railroad will shortly let contract for the erection of proposed eight-stall brick round-house 40x50 feet, 10-pocket coal chute, two cinder pits, foreman's combination office and storeroom 40x100 feet, of brick, brick oilhouse, car repairer's house, sand dryhouse, 70 feet turntable and one water tank; W. B. Drake, assistant general manager, St. Louis, Mo.

**Fort Worth-Lumber Plant.**—Lovely Lumber & Manufacturing Co. has been incorporated with \$10,000 capital stock by A. C. Ford, W. B. Ward, Jr., and T. C. Tabor; main office, Houston, Texas.

**Gilmer-Dry-kiln.**—Commercial Lumber Co. will erect hot-air dry-kiln, 30x130 feet, replacing kiln recently reported burned. About \$5000 will be invested; contracts awarded.

**Hempstead-Bridge.**—E. P. Alsbury, engineer, Houston, Texas, it is reported, has submitted an offer to build a bridge across the Brazos river for \$8500 and will probably receive contract.

**Hillsboro-Cotton Mill.**—Hillsboro Cotton Mills expects to double equipment next fall; now has 2500 spindles and 80 looms.

**Hillsboro-Telephone System.**—City will let franchise to the Texas Telephone Co. for constructing telephone system.

**Houston-Lumber Plant.**—Southern Texas Lumber Co. has increased capital stock from \$200,000 to \$400,000.

**Houston-Lumber Company.**—Ulmer-Oilphant Lumber Co. has been incorporated with \$50,000 capital stock by F. S. Ulmer, C. D. Oilphant and O. C. Ulmer.

**Houston-Showcase Factory.**—Chartered: Bender-Brown Showcase Co., with \$10,000 capital stock, by John M. Bender, Bernard Brown and George N. Torrey. Site has been secured on which to locate plant and machinery purchased.

**Houston-Oil and Gas Wells.**—Pickett-Henry Oil Co. has been incorporated with \$5000 capital stock. E. B. Pickett is president; J. L. Henry, vice-president, and W. L. Lane, secretary-treasurer.

**Mineola-Pickle and Canning Factory.**—Texas Pickle & Canning Co., recently reported incorporated with \$10,000 capital stock, will operate pickle and canning factory. A building 42x92 feet will be erected and about \$5000 will be invested in buildings and equipment; A. Patton, president, and T. A. Morrison, manager.

**Nacogdoches-Saw-mill.**—Stern Lumber Co. has been organized by A. Y. Donegan, E. M. Dotson and R. W. Persons to erect a saw-mill with a daily capacity of 20,000 feet.

**San Antonio-Cement-block Factory.**—It is reported that the Harris Lumber Co. of Seguin, Texas, will establish plant for manufacturing hollow cement building blocks.

**San Antonio-Cannery.**—San Antonio Canning Co. has been formed with \$20,000 capital stock for canning fruits, vegetables and Mexican dishes. About \$12,000 will be expended in buildings and equipment.

**San Augustine-Lumber Mill.**—B. S. Ferguson, M. L. Ferguson and B. E. Rawls have incorporated the Ferguson Manufacturing Co. with \$10,000 capital stock.

**Seguin-Cement-block Factory.**—Harris



Lumber Co. is reported as considering the establishment of plant for the manufacture of hollow cement building blocks.

Spring-Saw and Planing Mill.—E. C. Barrett of Huntsville, Texas, it is reported, will establish saw and planing mill; capacity 30,000 feet daily.

Snyder-Cement Construction.—B. F. Womack, W. S. Boling, A. C. Wilmeth and others have incorporated the Cement Construction Co. with \$10,000 capital stock.

Taylor-Cotton Gin.—Barney Cunningham will erect cotton gin; daily capacity 40 bales.

Wallsville—Irrigation and Rice Plant.—Old River Rice Irrigation Co., Dr. T. W. Shearer, president and general manager, is installing machinery for increasing the capacity of irrigation plant. The present 30-inch pump will be increased to 36 inches, giving a capacity of 15,000 gallons per minute. The acreage of land to be irrigated will be increased during the year to 9000 acres and the plant will have an output of 100,000 sacks of rice.

Weatherford—Telephone System.—G. A. Holland, R. S. Lowe, W. D. Carter, C. C. Littleton, J. T. Cotton and others have incorporated the Home Telephone Co. with \$50,000 capital stock.

#### VIRGINIA.

Alexandria—Land Improvement.—Edwards Land & Building Co. has been incorporated with an authorized capital stock of \$100,000. Scott Nesbit is president; Frank E. Rapp, secretary, and B. F. Edwards, treasurer, all of Washington, D. C.

Alexandria—Brick Works.—Patuxent Brick Co. has been incorporated with an authorized capital stock of \$100,000. Charles Childs is president; F. J. Coleman, secretary, and A. J. Curtis, treasurer, all of Washington, D. C.

Bowling Green—Telephone System.—Caroline County Telephone Co. has been organized with \$10,000 capital stock to build 100 or more miles of telephone lines throughout the county. C. T. Smith is president; W. E. Ennis, vice-president; Norman T. McManaway, secretary, and L. E. Martin, treasurer. Mr. McManaway was reported last month as organizing company for this purpose.\*

Bristol—Extract Factory.—Reports state that the Smethport Extract Co. will double its plant's present capacity of 30 to 40 barrels daily.

Culpeper—Hardware, etc.—Culpeper Hardware & Manufacturing Co. has been incorporated with \$10,000 capital stock. E. A. Walter is president, and John S. Covington, secretary-treasurer.

Emporia—Cotton Mill.—Ashby Cotton Mill Co. contemplates doubling its capacity; 5500 spindles now in position.

Gloucester Point—Cement-block Factory.—Cattlett Bros. of Gloucester C. H., Va., have secured site on which to erect plant for the manufacture of cement building blocks.

Hampton—Light and Heating Plant.—Chartered: Public Service Corporation of Virginia, with an authorized capital stock of \$300,000, to produce and distribute light, heat, power and compressed air. J. W. Rowe is president; H. F. Elam, secretary, and S. C. Rees, treasurer.

Lynchburg—Cable Line.—Isaac D. Smead & Co., Cincinnati, Ohio, are engineers in charge of constructing cable line for the Lynchburg Cable Line Co., to be used in assisting loaded wagons up hill; capacity three wagons a minutes.

Manchester—Filtration Plant.—City has completed arrangements for constructing proposed gravity filtration plant, and bids will be received until May 15; Matthew Morton, secretary.\*

Newport News—Reservoir.—West Richardson has contract to construct proposed reservoir for the Newport News Light & Water Co.; the work to include a 1,500,000-gallon concrete-covered reservoir and a 3,000,000-gallon pumping station at Newport News and a 4,000,000-gallon filter plant at main station. Lee Hall, Va. About \$100,000 will be expended. A. Wagner is engineer in charge.\*

Norfolk—Steam Laundry.—Norfolk Steam Laundry, Consolve & Cheshire, proprietors, 355 Main street, have secured site on which to erect building 68x232 feet. About \$75,000 will be expended in buildings and equipment. Machinery has been purchased; Neff & Thompson, architects.

Norfolk—Steel Bridge.—Tidewater Railway Co., mentioned recently as to construct a bridge over New river, will build a steel bridge 2155 feet long, consisting of 1475 feet of viaduct in 30 and 60-foot spans supported by steel bents resting on concrete pedestals; average height of viaduct, steel portion, 83 feet; average height of masonry pedestals, 10 feet; 680 feet of deck truss bridge in five spans of 136 feet, each resting on concrete

piers the height of which is 96 feet above bottom of river; depth of deck trusses 31 feet; total height of bridge over river 127 feet. H. Fernstrom is chief engineer, and Raymond Du Puy, general manager.

Petersburg—Cotton Mill.—Virginia Consolidated Milling Co. contemplates installing new steam engines and water-wheels.

Petersburg—Lumber Company.—Petersburg Lumber Co. has been incorporated with an authorized capital stock of \$10,000. R. O. Egerton is president and treasurer; D. M. Brown, secretary, and H. C. Southall, general manager.

Pulaski—Ice Plant.—T. R. Corder will install ice plant of three to five tons daily capacity, and later contemplates adding cold-storage plant.\*

Raven—Coal Mines.—Raven Red Ash Coal Co. has applied for a charter with \$40,000 capital stock to mine coal near Raven. It is proposed to install the latest-improved electric mining machinery for an output of from 800 to 1200 tons daily. From 50 to 100 operatives' houses will be erected. M. R. McCorkle, Richlands, Va., is manager; J. N. Harman, president, and J. N. Harman, Jr., secretary-treasurer, both of Tazewell, Va.

Richmond—Concrete-block Factory.—Virginia Granolithic Building Block Co., recently reported incorporated with \$10,000 capital stock, will manufacture concrete building blocks; daily capacity to be 200 cubic feet. A frame building, 30x60 feet, will be erected; machinery has been purchased. S. S. Start is president; M. B. Start, vice-president, and H. B. Start, secretary-treasurer; office, 1321 West Main street.\*

Richmond—Real Estate.—Chartered: American Realty Corporation, with an authorized capital stock of \$100,000. D. A. Ritchie is president; P. F. Williams, secretary-treasurer.

Richmond—Foundry.—Richmond Foundry & Manufacturing Co., previously reported as having secured site on which to locate plant, has begun construction work. The foundry will be built of brick and steel, 32x50 feet wide, side walls of building glazed from end to end, and the roof will have a monitor, also glazed. Provision has been made for three cupolas. An industrial railway will bring the iron and coke to the cupolas, and a similar track will carry castings from foundry to cleaning and finishing departments. A three-story building, 80x170 feet, will be erected for the warehouse and shipping department. Additional departments will be for the making of sand cores, cleaning, grinding and nickel-plating. The company will remove its present equipment from plant now being operated, but additional cupolas, blowers, grinders, machine tools, etc., will be installed; Noland & Baskerville, architects. Contracts have all been let; Arthur Scrivenor, president and engineer in charge.

Richmond—Turbine Water-wheels, etc.—James Lee Shelton, Shafer Building, is organizing company for the manufacture of turbine water-wheels and power-transmission machinery. Construction work will shortly begin.\*

Roanoke—Printing Plant.—Stone Printing & Manufacturing Co. has let contract to E. Tatterson for two-story brick and steel factory building 120x143 feet, for which H. H. Huggins, 705 Terry Building, was previously reported as preparing plans.

Roanoke—Cotton Mill.—The Roanoke Cotton Mill Co. contemplates doubling its capacity; present equipment 6032 spindles.

Shenandoah—Machine Shop, etc.—Shenandoah Machine & Plumbing Co. has been formed to engage in a general repair and plumbing business. A foundry and blacksmith shop is also being erected.\*

South Boston—Distillery.—Poplar Creek Distilling Co. has been incorporated with an authorized capital stock of \$5000. G. T. Norwood is president, and J. C. Childrey, secretary-treasurer.

Suffolk—Gas Plant.—Suffolk Gas Co., reported last week as organized with \$20,000 capital stock to take over the Home Acetylene Gas Co., will build four to five miles additional mains. No new buildings will be erected; capacity 10,000 acetylene lights. Arthur Woolford is president; E. L. Folk, vice-president, and W. C. Harrell, secretary-treasurer; A. A. Umholtz, Lynchburg, Va., engineer in charge.\*

Sugar Grove—Lead Mines.—Chamberlin Mineral Co., 606 F street N. W., Washington, D. C., is developing lead properties in Rye valley, recently mentioned. A 100-ton concentrating mill will be erected. From \$12,000 to \$15,000 will be invested.\*

West Esmont—Flour Mill.—Green Mountain Milling Co., it is reported, will rebuild flour mill recently burned.

Whaleville—Timber Development.—J. M. Wolford, 108 Plume street, Norfolk, Va., has

purchased 1844 acres of timber land containing about 8,000,000 feet of pine timber which will be developed. A mill with a capacity of 20,000 feet daily, with lath machine, etc., will be erected.\*

Williamsburg—Land Improvement.—Colonial Extension Co., recently reported incorporated to develop as residence site Tazewell Hall property, has engaged A. Braxton Edmonds, civil engineer, 222 31st street, Newport News, Va., to make surveys and lay out the property into streets, building lots, etc.

#### WEST VIRGINIA.

Benwood—Brewery.—Huterman & Kramer have contract to erect brewery for the Benwood Brewing Co., recently mentioned. The building is to be 22x200 feet and equipped for an annual capacity of 35,000 barrels.

Charleston—Steel Plant.—Baldwin Steel Co., main office 133 Reade street, New York, mentioned in March as having purchased 12 acres of land on which to locate plant for the manufacture of high-grade crucible steel, has completed plans for the erection of a main building 120x400 feet and power-house 40x80 feet. About 1000 horse-power will be used in plant, probably electric. Two rolling mills, a 10-inch mill, a 13-inch mill, two crucible steel furnaces and 11 heating and annealing furnaces will also be installed.

Charleston—Coal-mining.—Incorporated: Devils Fork Fuel Co., with \$10,000 capital stock, by C. C. Stone, A. W. McDonald, V. L. Black of Charleston, L. Cohenom and H. T. Irvin of Columbus, Ohio.

Charleston—Publishing.—George V. McClintock, W. L. Mathews, J. N. Carnes and J. Wilcox Adams have incorporated the News-Mall Company with \$75,000 capital stock.

Charleston—Coal Mines.—New River Collieries Co. has been incorporated with \$10,000,000 capital stock. This company was previously reported organized with C. J. Wittenberg, 11 Broadway, New York, N. Y., president, for the development of approximately 30,000 acres of coal land which it had acquired.

Morgantown—Bridge Construction.—Monongalia county will vote May 12 on \$85,000 bond issue for constructing bridges. Address County Clerk.

Parkersburg—Roundhouse, Machine Shop, etc.—Baltimore & Ohio Railroad will expend about \$150,000 in improvements; to include enlargement of freight-yard to more than double its present capacity, erection of roundhouse, machine shop and oilhouse, and the building of a clinder pit. Bids for the work will shortly be asked; D. D. Carothers, Baltimore, Md., chief engineer.

Parkersburg—Novelty Works.—Chartered: Parkersburg Novelty Co., with \$25,000 capital stock, by A. C. Davis, J. F. Norris, W. E. Ely and others.

Sutton—Electric-light Plant.—Chartered: Development Industrial Co., with \$10,000 capital stock, by W. E. Raymond, Fred L. Fox, John Newton, Charles J. Hyer and Kure A. Holy, to establish electric-light plant.

Wheeling—Water-works Improvements.—City is arranging for enlarging and improving water-works; C. B. Brooks, city engineer.

Wheeling—Dyeing and Cleaning Works.—B. Montiegel has let contract for the erection of dyeing and cleaning plant previously reported to Louis Harttong & Sons; plans by Joseph Leiner & Sons Company; building to be three stories, 25x50 feet; ordinary construction; heated by natural gas; combination gas and electric fixtures; cost \$6000.\*

#### INDIAN TERRITORY.

Chickasha—Electric-power Plant.—City Railway Co. is making improvements to power plant and will erect brick addition 40x77.9 feet, equipping for a capacity of 300 kilowatts. About \$30,000 will be invested. E. E. Colby is engineer in charge, and E. T. Sykes of Minneapolis, Minn., architect.

Dewey—Glass Works.—Bartlesville Glass Co. of Bartlesville, I. T., is reported as to build glass plant.

Fort Gibson—Development Company.—Fort Gibson Development Co. has been incorporated with \$200,000 capital stock by L. J. Martin, W. P. Moore and B. F. Rice.

Lindsay—Electric-light Plant.—City is considering the installation of electric-light plant. Address The Mayor.

Sulphur—Ice Plant.—L. G. Leibman of Hobart, O. T., it is reported, has purchased site on which to erect a 20-ton ice plant.

#### OKLAHOMA TERRITORY.

Altus—Water-works and Electric-light Plant.—McQuatters Plumbing & Machine Co., Hillsboro, Texas, has contract for the construction of water-works and electric-light plant, recently mentioned; cost \$28,000.

Cold Springs.—Mining.—Incorporated: Lone Star-Wichita Mountain Mining Co., with \$2000 capital stock, by C. D. Parsons, W. N. Habbell and George W. Ray, all of Roosevelt, O. T.

Granite-Oil Wells.—Chartered: Myers Oil Co., with \$500,000 capital stock, by C. H. Myers, P. J. Stacey, C. E. Bruell and others.

Guthrie—Medicine Company.—International Mineral Remedy Co. of Guthrie and Kansas City, Mo., has been incorporated with \$1,000,000 capital stock by W. W. Rucke, E. E. Hull of Guthrie, William G. Grant of Pawnee, O. T., and associates.

Lawton—Milling, etc.—S. L. France, P. J. France of Lawton and Alfred Wishey of Houston, Texas, have incorporated the National Milling & Townsite Co. with \$2,000,000 capital stock.

Lawton—Manufacturing, etc.—Chartered: Western Manufacturing & Building Co., with \$250,000 capital stock, by A. E. Hammonds and associates.

Mangum—Telephone System.—Mangum Telephone Co. has been incorporated with \$100,000 capital stock by D. D. Taylor, D. H. Wright and others.

Noble—Telephone System.—A. L. Lewis, A. J. Burkett, W. E. Davis and associates have incorporated the Farmers' Telephone Co. with \$1000 capital stock.

Oklahoma City—Stone Works.—Oklahoma Oolite Stone Co. has increased capital stock from \$100,000 to \$1,000,000.

Shawnee—Manufacturing.—Incorporated: Acme Manufacturing Co., with \$10,000 capital stock, by J. H. Macey, Jr., Charles A. Bell and S. M. Martin.

Walter—Hardware.—Block-Fay Hardware Co. has been incorporated with \$10,000 capital stock by Howard S. Fay, Rose B. Fay and associates.

#### BURNED.

Augusta, Ga.—Buckeye Cotton Oil Co.'s warehouse; loss \$25,000.

Bellevue, Fla.—The Slaughter House; loss \$5000.

Concord, N. C.—Joseph A. Thompson's saw-mill.

Dallas, Texas—Building owned by C. A. Keating; loss \$20,000.

Davy, W. Va.—Blackstone Coal & Coke Co.'s coal tipples; loss \$10,000.

Freeport, Fla.—J. J. Macaskill & Co.'s saw-mill; loss \$75,000.

Hackley, La.—W. E. Alford & Co.'s store building; loss \$10,000.

Hanover, Va.—W. C. Parkinson's dwelling; loss \$10,000.

Harrisville, W. Va.—National Hotel, C. F. Corbin, proprietor; First National Bank, A. J. Wilson, cashier.

Jackson, Tenn.—Consumers' Ice Co.'s plant; loss \$40,000.

Jacksonville, Fla.—Municipal crematory. Address City Engineer.

Jasper, Fla.—Jasper Ginning Co.'s cotton gin and grist mill; loss \$10,000.

Logan, W. Va.—Logan Carriage Co.'s plant damaged \$5000.

Mt. Juliet, Tenn.—Mt. Juliet Milling Co.'s flour mill; loss \$6000.

Norfolk, Va.—Norfolk Protestant Hospital; loss \$100,000.

Ocala, Ga.—Ensign-Oskamp Company's dry-kilns; loss \$15,000.

Pennsboro, W. Va.—Pennsboro Grocery Co.'s warehouse; loss \$40,000.

Penola, Va.—L. D. George's planing mill; loss \$10,000.

Russellville, Ark.—Cotton gin owned by W. P. Platt and R. M. Newport; loss \$6000.

Sweetwater, Texas.—Sweetwater Cotton Oil Co.'s seedhouse; loss \$10,000.

#### Structures to Resist Earthquake.

The recent disaster in San Francisco will doubtless have its effect upon methods of constructing buildings in those sections of the country where it is possible that earthquakes may occur in the future. On the day after the California earthquake the builders of a large power station in Seattle, Wash., decided to change from brick and structural steel to reinforced concrete. It was decided by the engineers in charge that reinforced concrete will combine the elasticity of steel with the solidity of the adobe structures so commonly found in earthquake countries. The Seattle power station will be concrete throughout, even to the girders which support the 50-ton crane and the trusses of 60-foot span which carry the roof. It is interesting to know that this building is to be erected by Frank B. Gilbreth of Boston and New York.

## BUILDING NOTES.

\* Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

Ablene, Texas.—Lodge Building.—Woodmen of the World have purchased site on which to erect proposed \$15,000 building.

Amarillo, Texas.—Dormitory.—Goodnight College is arranging for the erection of a \$10,000 dormitory. Address The President.

Andalusia, Ala.—Church.—C. A. O'Neal, chairman building committee Baptist Church, will receive bids until May 30 for erection of church. Plans and specifications may be had of C. A. O'Neal or Frank Lockwood, architect, Montgomery, Ala.; bond required when contract let; J. Morgan Prestwood, secretary.

Anderson, S. C.—Warehouse.—Anderson Farmers' Union Warehouse has been incorporated with \$20,000 capital stock by J. B. Douthitt and B. Harris.

Aquilla, Texas.—School Building.—Town has voted affirmatively the \$6000 bond issue for the erection of school building. Address Town Clerk.

Asheville, N. C.—Hotel.—Faragher Engineering Co. of Cleveland, Ohio, has contract for building foundation and framework for reinforced concrete construction for hotel previously reported to be erected by the Smith estate, C. H. Miller, representative; six stories, 128x139 feet, and cost \$150,000. Two passenger and one freight elevator will be installed.

Asheville, N. C.—Building.—R. S. Smith is preparing plans for two-story brick building for the Johnson estate, W. T. Weaver, agent; cost \$20,000 to \$30,000. Electric lights will be installed.

Atlanta, Ga.—Library Building.—Georgia School of Technology is arranging for the erection of proposed Carnegie Library; K. G. Matheson, chairman of faculty.

Baltimore, Md.—Dwellings.—Walter B. McCordell, 43 Franklin Building, Baltimore and North streets, has commissioned John R. Forsythe, architect, 411 St. Paul street, to prepare plans and specifications for 56 two-story brick dwellings to be erected on Monroe between Baker and Presbury streets.

Baltimore, Md.—Dwellings.—George Plitt has awarded contract to John J. Leicht, 1210 Patterson avenue, for the construction of 22 two-story brick dwellings on Clifton avenue near 6th street to cost about \$36,000; Jacob F. Gerwig, architect, Hoffman Building, 11 East Lexington street.

Baltimore, Md.—Store Building.—Burk, Fried & Co., 748 East Lombard street, have purchased lot at southwest corner Baltimore street and Center Market Space and will erect store building on the site, which is 66x88 feet.

Baltimore, Md.—Store Building.—Louis East, 354 North Gay street, has awarded contract to W. H. Porter & Son, 505 East Forrest street, for the construction of an addition to store building at 354 North Gay street; one story, 15x94 feet; brick; steel beams.

Baltimore, Md.—Store Building.—Charles J. Bonaparte, 216 St. Paul street, has awarded contract to John Cowan, 106 West Madison street, for the construction of store building at northwest corner Baltimore and Frederick streets; five stories, 64x46 feet; brick with Indiana limestone trimmings; steel beams; electric wiring and fixtures; sanitary plumbing; steam-heating system; elevator; cost about \$20,000.

Baltimore, Md.—City Building.—Inspector of Buildings Edward D. Preston, City Hall, is preparing plans for stable and office building to be erected on lot recently purchased by the city at 27 South Frederick street; two stories, 30x50 feet.

Baltimore, Md.—Bulkhead.—The municipal Board of Awards, City Hall, has awarded contract to the Degnon Contracting Co., New York, for the construction of bulkhead on Pratt street and extending from Light street to West Falls avenue at their bid of \$62,502. Work will be done under supervision of N. H. Hutton, harbor engineer, City Hall.

Baltimore, Md.—Hotel.—Vincent Pipitone, Lombard and Grant streets, will erect hotel building at 110-116 East Lombard street; three stories; brick with stone trimmings; steel beams; electric wiring and fixtures; sanitary plumbing; heating system. C. L. Stockhausen, National Marine Bank Building, Gay and Water streets; M. C. Davis, 5 Hopkins Place; Frederick Wright Company, National Marine Bank Building, and Russell Construction Co., 17 East Saratoga street, are estimating on construction; bids to be in May 7; George Clothier, Jr., architect, Lobe Building, 15 South Gay street.

Baltimore, Md.—Apartment-house.—E. C.

Lawrence, builder, 423 East 25th street, will make extensive alterations to dwellings at 421 and 423 East 25th street, converting them into an apartment-house. Hot-water-heating system and fire-escape will be installed.

Baltimore, Md.—Dwellings.—Daniel Donnelly, 2333 East Hoffman street, has awarded contract to James M. Coulling, 1824 East Madison street, for the construction of 18 two-story brick dwellings on Oliver street near Patterson Park avenue to cost about \$23,000.

Baltimore, Md.—Hospital.—The Municipal Hospital Commission, City Hall, has commissioned Simonson & Pletsch, architects, American Building, Baltimore and South streets, to prepare plans and specifications for group of hospital buildings to be erected in suburbs of Baltimore. Plans provide for administration building, four pavilions, chapel, morgue, disinfecting plant, laundry and stable at total cost of about \$125,000. As only \$25,000 is now available, one pavilion and temporary quarters for attendants will be erected.

Baltimore, Md.—Store Building.—Joseph Castelberg, 106 North Eutaw street, and Martin Greenhouse of Philadelphia, Pa., have commissioned Louis Levi, architect, American Building, Baltimore and South streets, to prepare plans and specifications for store building to be erected on Baltimore street near Charles street. Site is 39x202 feet.

Baltimore, Md.—Hospital.—It is reported that D. W. & G. H. Thomas, builders, Vickers Building, 225 East German street, have been awarded contract for the construction of hospital for the Baltimore University School of Medicine, 23-29 North Bond street, at corner Maryland avenue and 27th street; four stories, 75x75 feet; brick with stone trimmings; reinforced-concrete construction; electric wiring and fixtures; sanitary plumbing; heating system; elevators.

Baltimore, Md.—Dwellings.—Charles B. Burdette, 205 Hoffman Building, 11 East Lexington street, has commissioned Jacob F. Gerwig, architect, Hoffman Building, to prepare plans and specifications for the construction of 27 dwellings on Maryland avenue and 28th street; three stories; brick with stone trimmings; tin roofing; electric wiring and fixtures; sanitary plumbing; steam-heating systems.

Baltimore, Md.—Dwelling.—Walter B. Swindell, 705 Cathedral street, will erect dwelling at Roland Park after plans and specifications by Wyatt & Nolting, architects, Builders' Exchange Building, 2 East Lexington street. Roland Park Company, Roland Park; John Cowan, 106 West Madison street, and Gladfelter & Chambers, 2072 Woodberry avenue, will estimate on the construction; bids to be in May 7.

Baltimore, Md.—Church.—Garrett Park Methodist Episcopal Church, U. S. Wright, pastor, 1835 West Lexington street, will erect church building at Monroe and Lexington streets; one story, 70x79 feet; brick with stone and terra-cotta trimmings; electric wiring and fixtures; sanitary plumbing; heating system. C. L. Stockhausen, National Marine Bank Building, Gay and Water streets, and B. F. Bennett, 123 South Howard street, are estimating on construction; Charles W. Bolton, 1007 Witherspoon Building, and J. J. Dull, architects, both of Philadelphia, Pa.

Baltimore, Md.—Warehouse.—Jacob Epstein, proprietor Baltimore Bargain House, Baltimore and Liberty streets, has purchased lot at Scott, Wicomico and Stockholm streets and will later erect storage warehouse on the site.

Baltimore, Md.—Dwelling.—Ellicott & Emmart, architects, 1101 Union Trust Building, Charles and Fayette streets, have prepared plans and specifications for a 2½-story frame and stucco dwelling to be erected at corner Kenwood and Goodwood roads, Roland Park. George A. Horner, Gladfelter & Chambers, 2072 Woodberry avenue; Arthur F. West, 217 South Gilmor street; John Cowan, 106 West Madison street; Roland Park Company, Roland Park; Morrow Bros., 212 Clay street, and Willard E. Harn, 109 Clay street, are estimating on construction.

Baltimore, Md.—Office Building and Warehouse.—Referring to office building and warehouse to be erected at Light and Quay streets by the Chesapeake Steamship Co., Reuben Foster, president, 530 Light street, the following contractors are estimating on the construction: B. F. Bennett, 123 South Howard street; Harry Brown, 109 Clay street; John Hiltz & Son, 3 Clay street; Wm. Steele & Sons, 17 West Saratoga street; Noel Construction Co., United States Fidelity & Guaranty Building, German and Calvert streets; R. H. Frazier & Sons, 220 St. Paul street, and John Wright, 18 Clay street; office building four stories, 48x60 feet; warehouse four stories, 21x48 feet; brick

with brownstone base and terra-cotta trimmings; steel beams; cast-iron columns; concrete fireproofing; slag roof; copper cornice; metal frames and sashes; alternate bids on ordinary construction for office building and mill construction for warehouse; electric wiring and fixtures, plumbing, heating system and elevators not included in contract; bids to be in May 7; Charles E. Cassell & Son, architects, Law Building, Courtland near Lexington street.

Baltimore, Md.—Church.—Referring to church to be erected at Jefferson and Oliver streets by the Second Baptist Church, Walter Rhodes, pastor, 1803 Walbrook avenue, the following contractors are estimating on construction: D. W. & G. H. Thomas, Vickers Building, 225 East German street; John Cowan, 106 West Madison street, and Henry S. Rippel, 7 Clay street; one story and basement, 62x66 feet; brick and stone; steel beams; slate roof; electric wiring and fixtures; sanitary plumbing; heating system; Edward H. Glidden, architect, Wilson Building, 301 North Charles street.

Baltimore, Md.—University Buildings.—The Baltimore University School of Medicine, 23-29 North Bond street, has purchased lot northeast corner Maryland avenue and 27th street and will erect several buildings on the site, which is 150x150 feet. Plans are now being prepared.

Baltimore, Md.—Referring to store building to be erected at 414 and 416 East Baltimore street by Joseph Gebhart, 626 East Baltimore street, the following contractors are estimating on construction: John Stack & Sons, 250 West Preston street; George Bunnecke & Sons, 305 St. Paul street; James F. Farley, 207 North street; J. H. Miller, 110 Dover street; Joseph Schamberger, 2201 East Baltimore street; M. C. Davis, 5 Hopkins Place; three stories, 33x99 feet; brick with stone trimmings; steel beams; tin roof; electric wiring and fixtures; sanitary plumbing; heating system; Louis Levi, architect, American Building, Baltimore and South streets.

Baltimore, Md.—Store Building.—J. Wilson Leakin, 705 Fidelity Building, Charles and Lexington streets, has purchased store buildings at northeast corner Fayette and Howard streets and will make extensive alterations.

Baltimore, Md.—Pier.—The Baltimore & Ohio Railroad Co. has awarded contract to the Baltimore Bridge Co., Bush street and Baltimore & Ohio Railroad, for the construction of superstructure for pier at Locust Point; two stories, 225x1000 feet; steel columns, girders and beams; heavy-timber floor joists; corrugated-iron sides; metal frames and sashes and skylights glazed with wire-glass; fire doors; composition roofing; high-pressure water service for fire protection; eight elevators; four barrel hoists and four traveling cranes, all operated by electricity. The plans and specifications covering the work were prepared by the engineering department of the railroad company, of which D. D. Carothers is chief engineer.

Baltimore, Md.—Dwellings.—Mortimer W. West, 763 Calvert Building, Fayette and St. Paul streets, has awarded contract to George Dorsey, 3301 E. Baltimore street, for the construction of seven 2½-story frame dwellings at Belle and Garrison avenues to cost about \$21,000.

Baltimore, Md.—Dwellings.—Abraham Niefeld, builder, 1502 North Bond street, will erect seven two-story brick dwellings on Bradford near Chase street to cost about \$7000.

Bartow, Fla.—Church.—Contract has been let for the erection of edifice (previously reported) for the Methodist Episcopal Church; 56x84 feet; brick; tile roof; steel ceiling; electric fixtures; cost \$11,500. B. F. Talley, Lakeland, Fla., prepared the plans.

Berkeley Springs, W. Va.—Church.—B. D. & M. E. Price are preparing plans for edifice to be erected by United Brethren Church, George P. Holt, pastor; brick construction, 50x84 feet; hot-air-heating plant; electric fixtures; seating capacity 330; cost \$6000.

Birmingham, Ala.—Church.—Bids will shortly be asked for the erection of proposed \$50,000 edifice for Five Points Methodist Church after plans by P. Thornton Marye, Atlanta, Ga.

Birmingham, Ala.—Church.—Woodlawn Baptist Church is arranging for the erection of \$30,000 edifice. Address The Pastor.

Blacksburg, S. C.—Church.—John Freund, Jr., 20 Builders' Exchange, Baltimore, Md., is preparing plans for edifice previously reported to be erected by Blacksburg M. E. Church; main building 33x53 feet, with Sunday-school 16x34 feet, arranged so as to throw into one; concrete walls; frame interior; metal-shingle roof and spire; cost \$4000.

Blackstone, Va.—College Building.—Reports state that a \$20,000 addition will be erected to

the Hoge Memorial Military Academy. Address The Superintendent.

Blackstone, Va.—School Building.—Site has been secured on which to erect \$10,000 brick school building, previously mentioned; Geo. P. Adams, mayor.

Bluefield, W. Va.—Church.—Wilson & Seay, Lynchburg, Va., have contract to erect edifice for the Presbyterian church after plans by H. H. Huggins, 705-6 Terry Building, Roanoke, Va.; cost \$22,000.

Bristol, Tenn.—Library Building.—Plans and specifications have been prepared for a \$21,000 Carnegie library building at Washington College; Dr. J. T. Cooter, president.

Brooksville, Fla.—Hotel.—Boiling & Patterson of Jacksonville, Fla., have contract at \$16,041.75 for the erection of proposed hotel; to be of white pressed brick with stone trimmings; slate roof.

Brunswick, Md.—Association Building.—Construction work has begun on the proposed three-story building to be erected by the Y. M. C. A. at a cost of \$15,000. H. B. Funk is the contractor.

Cape Girardeau, Mo.—Clubhouse.—L. B. Blackwood is preparing plans for four-story clubhouse 60x100 feet to be erected by Elks Club, and bids for the erection will be opened about June 20. Steam heat and electric lights will be installed; cost \$40,000.

Chattanooga, Tenn.—Telephone Exchanges. East Tennessee Telephone Co. is reported as arranging for the installation of three new telephone exchanges.

Clarksville, Tenn.—School Building.—City has purchased site 200x202 feet on which to erect proposed \$20,000 brick school building. Address The Mayor.

Clifton Forge, Va.—Hotel Improvement.—Alleghany Construction Co. has contract for improvements to Gladys Inn.

Clinton, S. C.—Warehouse.—Lydia Cotton Mills will erect warehouse.

Cockeysville, Md.—Warehouse.—Jacob Peter, 411 St. Paul street, Baltimore, Md., has contract for the erection of proposed bonded warehouse for the Sherwood Distilling Co.; four stories, 91x140 feet; cost \$25,000. Elevators and steam heat will be installed.

Columbia, S. C.—Hotel.—Richland Investment Co. has completed organization with A. E. Gonzales, president and treasurer, and F. H. Hyatt, secretary. It is proposed to convert the Columbia Female College into a winter hotel.

Columbia, S. C.—Theater.—J. F. Ong has been awarded contract at \$11,926 for remodeling the Columbia Theater, previously reported; J. B. McElfatrick, 1402 Broadway, New York, N. Y., architect.

Concord, N. C.—Lodge Building.—Hook & Rogers, Charlotte, N. C., have completed plans for three-story brick building previously reported to be erected by the Odd Fellows.

Cordele, Ga.—Courthouse and Jail Building.—Crisp county will vote in July on a bond issue for courthouse and jail building 90x120 feet of fireproof construction to cost \$100,000; mentioned last week; S. W. Coney, ordinary.

Dallas, Texas.—Store and Lodge Building.—Chrisman & Nesbit have contract to erect store and lodge building for the Woodmen of the World, previously reported; Lang & Witcheil, 623 Wilson Building, architect.

Dallas, Texas.—Church.—Westminster Presbyterian congregation is considering the erection of edifice. Robert Hill is pastor.

Douglas, Ga.—Church.—George C. Thompson, Atlanta, Ga., is preparing plans for edifice to be erected by the Methodist congregation; brick; limestone; terra-cotta; galvanized iron; tin, etc.; cost \$12,000.

East Radford, Va.—Church.—H. H. Huggins, Rooms 705-6 Terry Building, Roanoke, Va., has plans for a \$10,000 edifice to be erected by the Methodist congregation.

East Radford, Va.—Opera-house.—H. C. Tyler is having plans prepared by H. H. Huggins, Rooms 705-6 Terry Building, Roanoke, Va., for a \$25,000 opera-house.

Ellicott City, Md.—Bank Building.—The building to be erected by the Washington Trust Co., for which Willis & Mason, 324 West Biddle street, Baltimore, Md., were mentioned last week as having contract, will be 25x55 feet, with masonry foundation; brick above; marble front; terra-cotta cornice; ordinary construction; steam or hot-water-heating plant; electric lights; ornamental plastering; cost \$18,000; Mottu & White, 326 North Charles street, Baltimore, Md., architects.\*

Ensley, Ala.—Bank Building.—First National Bank and the Bank of Ensley, recently consolidated, are considering the erection of four-story building.

Fort Worth, Texas.—Hotel.—Long-Evans Company has been incorporated with \$20,000



capital stock by C. F. Long, C. R. Evans and J. C. Cresham to erect hotel.

Fort Worth, Texas.—Hotel.—Conrad Hoefler, 603½ Main street, is preparing plans and will receive bids about June 1 for hotel to be erected by Ed Siebold; four stories, 90x100 feet; press brick, limestone, terra-cotta and marble; steel work; tin and asphalt roofing; electric fixtures; cost \$35,000.

Fort Worth, Texas.—Sunday-school Building.—College Avenue Baptist Church, F. M. Masters, pastor, has let contract for the erection of proposed Sunday-school building; brick; to cost \$10,000.

Frederick, Md.—Association Building.—Young Men's Christian Association is considering the erection of \$25,000 building; J. H. Apple, chairman building committee.

Frederick, Md.—Bank Building.—Frederick Town Savings Institution, M. E. Doll, president, is considering the erection of a one-story fireproof building with granite front.

Georgetown, Texas.—Dormitory.—Belford Lumber Co. has contract to erect three-story dormitory previously reported for the Southwestern University; cost \$60,000.

Greenville, S. C.—Masonic Temple.—J. E. Sirmine is preparing plans for building previously reported to be erected by the Masonic Temple Co.

Hagerstown, Md.—College Buildings.—Kee-Mar College is reported as to erect additional buildings and make other improvements. The capital stock of the corporation has been increased from \$10,000 to \$40,000.

Hampton, Ark.—Courthouse.—T. M. Means, county judge, and C. L. Poole, commissioner, will receive bids until May 28 for construction of courthouse for Calhoun county. Plans and specifications may be seen at office of commissioners; also at office of Gibb & Sanders, architects, Reider Building, Little Rock, Ark. Certified check for \$500 must accompany each bid. Usual rights reserved.

Highland, Md.—Bank Building.—Highland Bank of Howard county, Dr. W. W. L. Cissel, president, is having plans prepared for erection of building.

Houston, Texas.—Business Block.—Plans have been completed by Sanguinet, Staats & Suetter and bids will shortly be asked for three-story brick and stone business block, 100x70 feet, to be erected by the estate of John Levy.

Jackson, Miss.—Office Building.—C. D. Stewart has contract to erect three-story press-brick office building for Morris Mayer.

Jacksonville, Fla.—Dwelling.—P. F. Wilson is arranging for the erection of a two-story residence.

Jacksonville, Fla.—Dwelling.—C. D. Mills has had plans prepared by W. B. Camp for the erection of 1½-story white pressed-brick residence.

Jacksonville, Fla.—Dwelling.—W. J. Klutho is preparing plans for residence to be erected by W. R. Carter; brick veneer; slate roof; cost \$8000.

Jacksonville, Fla.—Flats Building.—M. D. Bird and V. G. Bird of St. Nicholas, Fla., will shortly ask bids on the erection of three-story pressed-brick flat building 48x48 feet to cost \$14,000; W. B. Camp, architect.

Jonesboro, Ark.—Church.—Contract will be let about May 1 for the erection of edifice for the First Baptist Church, mentioned last week; gray pressed brick trimmed with stone; cost \$35,000; R. H. Hunt, Chattanooga, Tenn., architect. G. W. Puryear is chairman of building committee.

Kansas City, Mo.—Storage Building.—Architect Seested is preparing plans for building mentioned recently to be erected by D. W. Dehoney; 60x142 feet; mill construction; electric fixtures; cost about \$20,000.

Knoxville, Tenn.—Store Building.—The Swenson estate has let contract to A. J. Cloyd to erect a four-story building.

Knoxville, Tenn.—Church.—John W. Emery, Philadelphia, Pa., has contract to erect edifice for the Second Presbyterian Church after plans by Isaac Purcell, Philadelphia, Pa.; church building to be 95x138 feet; manse 24x60 feet; ordinary construction; steam heat; electric lights; cost \$110,000.

Lagrange, Ga.—Warehouse.—The Troup Company will let contract about May 15 for the erection of cotton warehouse after plans by A. F. Walker, Atlanta, Ga.; brick; three compartments; capacity 10,000 bales of cotton; mill construction; electric lights; cost \$25,000.

Lake Charles, La.—Opera-house.—L. N. Taylor is organizing company for the erection of opera-house; light pressed brick with stone trimmings; cost \$75,000.

Lakeland, Fla.—Store Building.—Contract will shortly be let for store building for S. Raymondo, for which Talley & Gasser were mentioned recently as preparing plans; 40x75

feet; fireproof construction; electric fixtures; cost \$7250.

Live Oak, Fla.—Bank Building.—Central Bank & Trust Co., Thomas Dowling, president, will erect \$15,000 building.

Lonaconing, Md.—Newspaper Building.—J. J. Robinson, editor of Star, wants bids for the erection of building in accordance with plans and specifications on file at his residence on Railroad street. Usual rights reserved.

Louisville, Ky.—Apartment-house.—J. N. Struck & Bro. have contract to erect apartment-house for Mrs. Harriet Bijur after plans by Val P. Collins, Courier-Journal Building; five stories, 105x30 feet; brick and reinforced concrete construction; slate roof; electric lights; cost \$25,000.

Louisville, Ky.—School Building.—Caldwell & Drake will probably be awarded contract at \$43,440 for the erection of school building previously reported.

Lynchburg, Va.—Dwelling.—Agnor & Son have contract to erect residence for R. C. Stokes after plans by Lewis & Burnham; brick; hot-water-heating plant; gas and electric fixtures; cost \$12,500.

Macon, Ga.—Building.—James T. Robinson has contract to erect building for Ben L. Jones after plans by Curran R. Ellis; 210x210 feet; mill construction; gas and electric fixtures.

Macon, Mo.—Infirmary.—Bids will be received until May 8 by Nick M. Moody, county clerk of Macon county, Macon, Mo., for furnishing all material (except what is now on site) and labor necessary for the reconstruction of the county infirmary in accordance with plans and specifications on file in the office of Harvey Chatten, architect, Wells Building, Quincy, Ill., and the county clerk. Certified check for 2 per cent. of amount of bid must accompany each proposal. Usual rights reserved.

Marble City, I. T.—Bank Building.—E. Bee Guthrey of Marble City, A. W. Pipes of Laredo, Mo., and W. A. Reger of Reger, Mo., are arranging for the erection of marble bank building.

Memphis, Tenn.—Warehouse.—Contract will be let May 6 for warehouse previously reported to be erected by J. Rose after plans by L. M. Weathers & Co.; 201x174 feet; mill construction; steam heat; electric fixtures; 6000-pound-capacity elevator.

Memphis, Tenn.—Dwelling.—M. J. Gallagher has contract to erect two-story veneered residence for Hugh L. Buckingham, for which L. M. Weathers was previously reported as preparing plans.

Memphis, Tenn.—Cathedral Nave.—Thomas James has contract for building the nave of St. Mary's Cathedral recently mentioned; cost \$31,000; L. M. Weathers & Co., architects.

Memphis, Tenn.—Apartment-house.—E. M. Apperson has contract to erect apartment-house for Russell Martin, for which Chighizola, Hanker & Cairns were previously reported as preparing plans; three stories, of brick with concrete foundation.

Mobile, Ala.—Cottages.—E. E. Ward has contract to erect three two-story frame cottages for Southern Realty Co. after plans by McCrary & Slater; cost \$15,000.

Mobile, Ala.—Dwelling.—Nickelson & Legge have contract to erect two-story frame residence with slate roof for Dr. E. L. Johnston after plans by Slater & McCrary; cost \$6000. Gas heaters and electric fixtures will be installed.

Mobile, Ala.—Buildings.—McCrary & Slater are preparing plans for two buildings to be erected by J. Pollock at a cost of \$12,000; brick veneered; slate roofs; hard plaster; plate glass; cabinet mantels; venetian blinds, etc.

Montgomery, Ala.—Fair Buildings.—Alabama Agricultural Association, 40½ Commerce street, has commissioned D. H. Long of Chicago, Ill., to prepare plans for the various buildings to be erected on fair grounds. Plans previously mentioned as being prepared by E. J. Ostling have been rejected.

Mooresville, N. C.—School Building.—City has voted affirmatively the \$10,000 bond issue recently mentioned for the erection of school building. A. L. Starr is mayor.

Murfreesboro, Tenn.—College Building.—The building to be erected by Tennessee College after plans by Wheeler, Runge & Dickey, Charlotte, N. C., mentioned last week, will be three stories, 250 feet long, equipped with steam or hot-water heating plant, gas and electric fixtures, hand-power elevator; cost \$40,000. Bids for the erection of building as a whole or in part are being received. C. H. Bryan is chairman of building committee.

Nashville, Tenn.—Warehouse.—Wholesale Merchants' Warehouse Co. has been incorpo-

rated with \$350,000 capital stock for the erection of proposed commercial warehouse; to be four stories of solid reinforced concrete construction with concrete roof; incorporators, Hunter McDonald, W. J. Cummins, W. P. Bruce, W. T. Huggins, Leslie Cheek, W. K. Phillips, T. O. Morris and associates. Mr. McDonald will be general manager. It is stated that W. J. Oliver & Co. of Knoxville, Tenn., have been awarded contract for construction work.

Nashville, Ark.—School Building.—School board has purchased site on which it is stated a \$12,000 building will be erected.

Natural Bridge, Va.—Hotel, Sanitarium, etc.—It is reported that a syndicate headed by C. H. Paxton of Natural Bridge and J. S. B. Spencer of Williamsburg, Va., has purchased the hotel property and the bridge tract, which will be developed. It is stated that a hotel and sanitarium will be erected.

Newnan, Ga.—Cotton Warehouse.—H. C. Fisher and H. C. Arnall have purchased site on which to erect brick warehouse 150x300 feet, to be divided into six compartments, each 50x150 feet, separated by a brick wall and equipped with patent fire extinguishers. It is proposed to organize a company with \$25,000 capital stock to operate same.

Newton, Miss.—Business Building.—J. C. McClinton has let contract to C. H. Dabbs of Meridian, Miss., for the erection of a three-story brick building 42x55 feet with pressed brick, steel and plate-glass front; P. J. Krouse, Meridian, Miss., architect.

Norfolk, Va.—Hotel.—Gregory & Williamson are lowest bidders on the erection of hotel previously reported for the Victoria Hotel Corporation after plans by Ferguson & Calrow, Carpenter Building; six stories, 56x142 feet; brick with stone and terra-cotta trimmings; steel columns and beams; gravel roof; fireproof floors, etc.

Norfolk, Va.—School Buildings.—Competitive preliminary plans will be received until May 20 for the erection of two school buildings; one building to have 12 rooms, exclusive of basement, and one 10 rooms, exclusive of basement; rooms to contain 850 square feet, and basements to have floors not more than two feet below ground. Usual rights reserved; Edmund S. Ruffin, chairman committee.

Oklahoma City, O. T.—Clubhouse.—Order of Eagles, recently organized, will erect five-story clubhouse to cost \$100,000.

Overton, Texas.—Bank Building.—Farmers and Merchants' Bank, recently organized with Otto S. Houston of Fort Worth, Texas, president, will erect white-brick building.

Paducah, Ky.—Cotton Warehouse.—Cohanus Manufacturing Co. will erect warehouse 136x50 feet.

Palestine, Texas.—Church.—Bids are being received for erection of edifice reported last week for Methodist Episcopal Church, South, after plans by Harvey L. Page, San Antonio, Texas; 70x111 feet; brick construction; hot-air-heating plant with ventilating system and fan; electric lights; cost \$22,000.

Pawhuska, O. T.—Masonic Temple.—Bids will be opened May 20 for the erection of Masonic Temple, for which Matthews & Ruggles, Tulsa, I. T., were previously reported as preparing plans; two stories, 30x102 feet; brick and stone; structural steel and iron; natural-gas-heating plant; combination electric and gas fixtures.

Pensacola, Fla.—City Hall.—Bids will be opened May 21 for erection of city hall. Plans and specifications can be obtained from Frederick Ausfeld, architect, Montgomery, Ala. Certified check for \$1000 must accompany each bid. Further information can be obtained from the architect or from L. Hilton Green, chairman board of bond trustees, Pensacola, Fla. (This advertisement was referred to last week.)

Petersburg, Va.—Warehouses.—Bristler & Harrison have contract to erect two storage warehouses for the British-American Tobacco Co.; warehouses to cover an area of 100x200 feet.

Petros, Tenn.—Store Building.—Big Brushy Coal & Coke Co. will rebuild store building recently reported burned; concrete construction; hot-water or steam heating plant; electric fixtures; cost \$5000. The company will have charge of the construction.

Pine Bluff, Ark.—Courthouse Improvements.—Prather Construction Co. of Fort Smith, Ark., has contract at \$28,469 for reconstructing Jefferson county courthouse, previously mentioned.

Port Conway, Va.—Dwelling.—F. P. Stearns, Fredericksburg, Va., has contract to reconstruct and build additions to residence for Dr. J. H. Low; cost \$12,000.

Ravila, I. T.—School Building.—City has voted affirmatively the proposed \$4000 bond issue for erection of school building. Address The Mayor.

Richmond, Va.—Hotel.—M. J. Dimmock and W. Duncan Lee are preparing plans for a \$100,000 hotel to be erected by local parties; six stories; brick and reinforced concrete. A bathing pool, 25x50 feet, lined with marble and mosaic and holding 45,000 gallons of water, will also be built. Water will be supplied from an artesian well 450 feet deep.

Richmond, Va.—Association Building.—Charles K. Bryant has completed plans for proposed five-story building 130x160 feet to be erected by the Young Men's Christian Association. Two electric elevators will be installed and the building will be equipped with gymnasium, bowling alley, etc.

Roanoke, Va.—Church.—Central Manufacturing Co. has contract to erect \$25,000 edifice for High Street Colored Baptist congregation after plans by H. H. Huggins, 705-6 Terry Building.

Roanoke, Va.—Dwelling.—A. G. Crosby has had plans prepared by H. H. Huggins, 705-6 Terry Building, for proposed \$8000 residence. Same architect has prepared plans for \$10,000 residence to be erected by Bruce Hunt.

Roanoke, Va.—Store Building.—J. F. Barber has contract to erect store building for the Virginia Brewing Co. to cost \$6000; H. H. Huggins, 705-6 Terry Building, architect.

Roanoke, Va.—Dwelling.—Contract has been let for \$5000 residence to be erected by the J. T. Gibson estate after plans by H. H. Huggins, 705-6 Terry Building.

Roanoke, Va.—Pavilion.—Roanoke Amusement Co. has let contract to Mahoney-Staples Company for the erection of pavilion 75x200 feet; ordinary construction; cost \$6000. Electric lights will be installed. H. H. Huggins, 705 Terry Building, prepared the plans.

Salem, Va.—Dwelling.—H. H. Huggins, Rooms 705-6 Terry Building, Roanoke, Va., has prepared plans for S. H. McVitty's proposed \$6000 residence.

Seguin, Texas.—Opera-house.—Opera-House Pleasure Club, H. J. Blumberg, president, will erect two-story brick building 80x120 feet of fireproof construction; cost \$20,000; previously referred to.

Shepherdstown, W. Va.—Church.—St. Peter's Evangelical Lutheran Church is having plans prepared for the erection of proposed edifice. Address The Pastor.

Sikeston, Mo.—Lodge Building.—L. B. Blackwood, Cape Girardeau, Mo., is preparing plans and will receive bids for two-story lodge building, 40x100 feet, for local lodge of Odd Fellows; brick and stone; steel construction; nickel plumbing; tin and composition roofing; electric light fixtures; cost \$9000.

South McAlester, I. T.—School Buildings.—School board is arranging for the erection of eight buildings of brick, equipped with steam heat, electric fixtures, recently mentioned. About \$160,000 will be expended. Architect has not been selected.

Spencer, N. C.—School Building.—L. B. Brickenstine of Winston-Salem, N. C., has contract for the erection of proposed \$12,000 school building.

Springfield, Mo.—Hotel.—Eugene McClanahan, 527 Baker Building, is preparing plans and will take bids for a hotel for J. A. Perkins; three stories, 21x100 feet; white enamel brick; stone; marble flooring; iron columns; steel beams; composition roof; concrete flooring; hard plaster; gas and electric fixtures; modern plumbing; cost \$10,000.

St. Louis, Mo.—Hotel Improvements.—Barnett, Haynes & Barnett, 906 Olive street, are preparing plans and will receive bids for four-story addition 60x300 feet, brick and stone, steel construction, to be erected to hotel for the Hamilton Hotel & Apartment Co., W. S. Williams, manager, at a cost of \$40,000.

St. Louis, Mo.—Sanitarium.—Commissioners of the State Sanitarium for the Treatment of Incipient Pulmonary Tuberculosis, Dr. W. M. Bayless, president, will let contract June 4 for the erection of one of a group of proposed buildings; H. H. Hohenschild, Rolla, Mo., architect.

St. Mary's City, Md.—Auditorium.—St. Mary's Seminary has commissioned N. R. Grinn, architect, 627 F street N. W., Washington, D. C., to prepare plans and specifications for auditorium; one story, 39x80 feet; brick with stone trimmings; slate roof; sanitary plumbing; hot-air-heating system; cost about \$10,000.

St. Matthews, S. C.—Warehouse.—Incorporated: St. Matthews Warehouse Co., with \$10,000 capital stock, by E. Wimberly, T. H. Dreher and J. W. Loryea.

Temple, Texas.—Masonic Temple.—Bids will be received until May 10 for the erection of Masonic Temple, previously mentioned; plans and specifications on file at the City National Bank.

Texarkana, Texas.—Church.—First Presbyterian Church is arranging for the erection

of brick edifice with stone trimmings to cost \$25,000. Address The Pastor.

Vicksburg, Miss.—Store Building.—W. H. Miller is having plans prepared by M. J. Donovan for two-story brick building with metal front, plate-glass show window and metal roof; modern plumbing, gas and electric fixtures.

Vicksburg, Miss.—Store Building.—M. J. Donovan is preparing plans for building for Joe Lavechla; two stories of brick with metal front and roof; plate-glass window; modern plumbing; gas and electric fixtures.

Washington, D. C.—Dwelling.—Major Gen. Henry C. Corbin has commissioned D. H. Burnham & Co., architects, 60 Massachusetts avenue N. E., to prepare plans and specifications for two-story reinforced concrete dwelling to be erected at Chevy Chase and cost about \$30,000.

Washington, D. C.—School.—Henry B. F. Macfarland, Henry L. West and John Biddle, District Commissioners, 464 Louisiana avenue N. W., will receive sealed proposals until May 5 for constructing eight-room school building on O street between 32d and 33d streets N. W. Plans and specifications may be obtained from office of the commissioners.

Washington, D. C.—Apartment-house.—Geo. S. Cooper, architect, 1413 G street N. W., is preparing plans and specifications for an apartment-house which he will erect on 18th street between R and S streets N. W.

Washington, D. C.—Church.—The Evangelical Lutheran Church of Atonement has commissioned Wm. Franklin Wagner, 1330 13th street N. W., and Haswell R. Williams, 1328 North Capitol street, associated architects, to prepare plans and specifications for the construction of church building to be erected at corner Rhode Island avenue and North Capitol street, and to cost about \$80,000. Plans provide for seating capacity of 1100 in church proper and 250 in chapel; building committee, Alfred Heilmüller, Brentwood road N. E.; Charles Read, 1819 North Capitol street, and Joseph Beck.

Washington, D. C.—Apartment-house.—J. L. Marshall, 1321 G street N. W., was the lowest bidder for the construction of apartment-house at 6th and E streets N. E. for Robert N. Harper, 467 C street N. E.; four stories, 32x105 feet; brick with limestone trimmings; steel beams; electric wiring and fixtures; sanitary plumbing; heating system; B. Stanley Simmons, architect, 931 F street N. W.

Washington, D. C.—Public Convenience Station.—Sealed proposals will be received until May 17 at the office of Henry B. F. Macfarland, Henry L. West and John Biddle, District Commissioners, for constructing a public convenience station at 13th street and Pennsylvania avenue N. W. to cost about \$25,000; separate proposals for plumbing work. Plans and specifications may be obtained from office of commissioners.

Washington, D. C.—Store Buildings.—Referring to three store buildings to be erected on 7th near P street N. W. by the Fowler estate, Charles D. Fowler, trustee, 437 7th street N. W., the following contractors are estimating on revised plans: Burgess & Parsons, 627 F street N. W.; S. J. Prescott Company, 709 13th street N. W.; Peter Fersinger, 1 N street N. W., and John C. Deichman, 1627 Trinidad avenue N. E.; one story; brick; tin roofing; electric wiring and fixtures; sanitary plumbing; heating system; bids to be in May 5; Appleton P. Clark, Jr., architect, 605 F street N. W.

Washington, D. C.—Office Building.—Stone & Fairfax, 1342 New York avenue N. W., have awarded contract to Charles A. Langley, 310 12th street N. W., for remodeling office building at 1340 New York avenue N. W.; electric wiring and fixtures; sanitary plumbing; heating system; tin roof; Appleton P. Clark, Jr., architect, 605 F street N. W.

Washington, D. C.—Dwellings.—Harry Wardman, builder, 717 14th street N. W., will erect five two-story brick dwellings at 130-138 W street to cost about \$20,000. Hot-air-heating systems will be installed.

Washington, D. C.—Dwellings.—E. A. Atchison, builder, 751 Fairmont street, will erect two three-story brick and stone dwellings at 1810 and 1812 Ingleside Terrace to cost about \$7000. Steam-heating system will be installed.

Washington, D. C.—Dwelling.—Lester A. Barr, 2117 California avenue N. W., has awarded contract to Houtz & Weiser, 638 G street N. W., for the construction of dwelling at 2122 Le Roy Place; three stories and basement, 21.6x50.6 feet; brick with stone trimmings; tin and slate roofing; electric wiring and fixtures; sanitary plumbing; steam-heating system; cost about \$12,000; B. Stanley Simmons, architect, 931 F street N. W.

Washington, D. C.—Car Shops.—The Capital Traction Co., 36th and M streets N. W., has awarded contract to James L. Parsons, Pennsylvania avenue and 13½ street N. W.,

for the construction of an addition to its car shops; one building two stories, 69.3x40 feet; one building one story, 75x160 feet; brick with stone trimmings; reinforced concrete construction; slag roof; cost about \$35,000.

Washington, D. C.—Dwellings.—Charles A. Langley, builder, 310 12th street N. W., will erect two two-story brick dwellings with hot-air-heating systems at 2450 and 2452 Brightwood avenue to cost about \$10,000.

Washington, D. C.—Garage.—Emile Berliner, 1420 New York avenue N. W., has awarded contract to Boryer & Smith, 1204 C street N. W., for the construction of one-story brick garage 18x30 feet in rear of 1453 Columbia road to cost about \$5000.

Washington, D. C.—Office Building.—Henry A. Willard, 1416 F street N. W., has awarded contract to Harry H. Hull, 117 U street N. W., for the construction of seven-story fireproof office building at 1422 F street N. W.; Lem W. Norris, architect, 1441 U street N. W.

Washington, D. C.—Store Building.—The United Cigar Stores Co., 941 Pennsylvania avenue N. W., has awarded contract to Wm. E. Mooney, Lenman Building, 1425 New York avenue N. W., for remodeling store building at corner New York avenue and 15th street N. W. Plans provide for new store front, mosaic floors and electric wiring and fixtures; Harding & Upman, architects, 729 15th street N. W.

Washington, D. C.—Dwelling.—Wm. K. Hill, 714 M street N. W., will erect 2½-story dwelling at Tacoma Park; frame construction with pebble-dash exterior; slate roof; hardwood finish; electric wiring and fixtures; sanitary plumbing; hot-water-heating system. N. T. Haller Company, architect, Corcoran Building, 15th and F streets N. W., is taking subordinates on construction.

Washington, D. C.—Store and Office Building.—Referring to store and office building to be erected on G street between 13th and 14th streets N. W. by Jordan & Bloomer, 1314 G street N. W., the following contractors are estimating on construction: George Loeffler, 903 Florida avenue N. W.; W. L. Turner, 41 Q street N. W.; Burgess & Parsons, 627 F street N. W.; Blundon & Simon, 1006 F street N. W., and James A. Dowrick, 62 Florida avenue N. W.; three stories, 27.8x82.10 feet; brick with stone trimmings; tin roof; electric wiring and fixtures; sanitary plumbing; steam-heating system; Hunter & Bell, architects, 1010 F street N. W.

Washington, D. C.—Store Building.—Mrs. Folks has awarded contract to Henry Bleber, 503 M street S. W., for the construction of store building on Brightwood avenue, Brightwood, D. C.; two stories and basement; brick with stone trimmings; tin roof; sanitary plumbing; electric wiring and fixtures; C. E. Webb, architect, Warder Building, 523 9th street N. W.

Washington, D. C.—Dwellings.—The Capital City Improvement Co. has awarded contract to L. E. Breuninger, 1123 Dartmouth street N. W., for the construction of five two-story brick and stone dwellings at northeast corner 1st and P streets N. E.; slate and slag roofing; sanitary plumbing; hot-water-heating systems; N. R. Grimm, architect, 627 F street N. W.

Washington, D. C.—Apartment-houses.—The Washington Sanitary Improvement Co., 235 P street N. W., will erect six apartment-houses at P and Bates streets N. W.; two stories; brick with stone trimmings; sanitary plumbing; tin roofing. Thomas H. Melton, 19 T street N. W.; Osterman & Butler, 325 Colorado Building, 14th and G streets N. W.; W. L. Turner, 41 Q street N. W.; Peter Fersinger, 1 N street N. W., and Burgess & Parsons, 627 F street N. W., are estimating on construction; bids to be in May 5; Appleton P. Clark, Jr., architect, 605 F street N. W.

Wauchula, Fla.—Church.—The edifice to be erected by the Baptist congregation, for which W. B. Talley, Lakeland, Fla., was recently mentioned as preparing plans, will be 53x73 feet; fireproof construction; steam heat; gas or electric fixtures; cost \$7500 to \$8000. W. W. Bateman is chairman of building committee.\*

Waycross, Ga.—Bank and Office Building.—Beach Investment Co. will begin at once the erection of three-story brick bank and office building.

West Palm Beach, Fla.—School Building.—H. C. Hood, chairman board of school trustees, will receive bids until May 29 for two-story and basement concrete-block school building in accordance with plans and drawings which can be obtained from H. C. Hood, chairman school trustees, and Bruce, Everett & Hays, architects, 706-708 English-American Building, Atlanta, Ga., on deposit of \$10. Certified check for \$1000 must accompany each bid. Usual rights reserved.

Wetumka, I. T.—School Building.—Architect has not been engaged to prepare plans

for two-story brick school building for which a \$14,000 bond issue was reported last week as voted; ordinary construction; equipped with steam heat; W. W. Price, clerk of school board.\*

Wheeling, W. Va.—Business Building.—McDonald Bros. have contract to erect building for Sam R. McKee after plans by Giesey & Faris; three stories, 67x100 feet; brick and stone; natural-gas-heating plant; electric and gas fixtures; electric elevator; cost \$14,000.

Wilmington, N. C.—Warehouse.—M. J. Corbett has let contract for the erection of two warehouses of frame construction covered with iron.

Windsor, N. C.—Courthouse Improvements. R. F. Smith Fireproofing Co., Washington, D. C., has contract at \$10,300 for making improvements to Bertie county courthouse, previously mentioned.

Wrightsville, Ga.—Warehouse.—W. C. Chester has contract to erect warehouse for W. C. Thompson; two stories, 58x65 feet; mill construction; electric lights; cost \$3000.

Wrightsville, Ga.—Dwelling.—W. C. Chester has contract to erect W. C. Tompkins' proposed \$8000 residence.

## RAILROAD CONSTRUCTION.

### Railways.

Altus, O. T.—The Oklahoma & Panhandle Railroad Co. has been chartered with \$3,000,000 capital to build a line 300 miles long from Altus west through the Texas Panhandle to Portales, N. M., and southeast from Altus to Waurika, O. T. The incorporators are Claude Miller, Robert Dunlap, C. C. Hightower, H. T. Kimble, A. C. Fagin, J. G. Atkins, J. C. McClay, E. R. McDaniel, Mike C. Lemaster and J. S. Wood, all of Altus. J. Elmer Thomas of Lawton, O. T., is also said to be interested.

Ardmore, I. T.—An official of the Santa Fe system, referring to a recent press report that the company was surveying for a line from Ardmore to the Texas Panhandle and Colorado, informs the Manufacturers' Record that he has no knowledge of any such engineering work.

Atlanta, Ga.—The Gate City Terminal Co. has applied for a charter to build a line about three miles long from Howell's Station to a point at or near the center of Atlanta; capital stock \$500,000. The incorporators are P. S. Arkwright, I. S. Hopkins, Jr., W. B. Stovall, R. E. Cullinan, F. M. Slak, H. M. Milam, Walter T. Colquitt, Ben J. Conyers, L. Oscar Simmons and G. W. Brine.

Augusta, Ga.—The Augusta Connecting Railroad Co. has applied for a charter to build a line about six miles long from a point near the center of Augusta to another point about five miles south of the city limits, to connect there with the Augusta & Florida Railway. The incorporators are Jacob Phinizy, James T. Bothwell, George R. Lombard, Frederick B. Pope, William H. Barrett and William E. Bush of Augusta, Ga.; John Skelton Williams and E. L. Bemiss of Richmond, Va.; J. Wm. Middendorf and R. Lancaster Williams of Baltimore, Md.

Baltimore, Md.—The Lorain Electric Railway Co. has been incorporated in Baltimore county to build a line not more than 12 miles long; capital \$25,000. The incorporators are William C. Page, Leonidas G. Turner, Dr. George Y. Everhart, William E. Zimmerman and C. Frank Emmart. They, together with James M. Blackburn, Balfour B. Parry, Jas. H. Preston and Edward W. Turner, are directors.

Baton Rouge, La.—C. G. Vaughn, chief engineer in charge of construction, is reported as saying that more contractors are desired for work on the Baton Rouge and Lafayette extension of the Southern Pacific, 52 miles long. A section of eight miles has been let to Andrews & Sons of Beaumont, Texas, and the contract for the Arnaudville branch has been let to J. L. Haralson of Houston, Texas. Mr. Vaughn's address is at New Orleans.

Beaumont, Texas.—J. A. Andrews & Son of Beaumont have been given a contract to build eight miles on the Texas & New Orleans branch between Breaux Bridge and Bayou Teche, La. This is on the line from Baton Rouge to Lafayette, Ind.

Big Stone Gap, Va.—The Cumberland Traction Co., which proposes to build an electric railway from Big Stone Gap via Appalachia and Blackwood to Norton, Va., and which was lately chartered, has organized as follows: W. T. Goodloe, president; J. W. Kelley, vice-president; J. S. Wright, secretary and treasurer; directors, W. T. Goodloe, J. W. Kelley, J. S. Wright, J. A. L. Minor, Dr. Karl Stoehr, Dr. W. G. Painter and J. S. Hamblen.

Big Stone Gap, Va.—President W. T. Goodloe of the Cumberland Traction Co. writes

the Manufacturers' Record that a charter has been obtained for an electric railway 14 miles long from Big Stone Gap via Appalachia and Blackwood to Norton, Va. The officers are: W. T. Goodloe, president; J. W. Kelley, vice-president; J. W. Wright, secretary and treasurer; Malcolm Smith, engineer, and R. T. Irvine, attorney, all of Big Stone Gap; capital \$25,000.

Birmingham, Ala.—An officer of the Seaboard Air Line writes the Manufacturers' Record confirming the press report that the company is making surveys in the Warrior coal fields, but he says that nothing has been determined as to construction.

Birmingham, Ala.—The Illinois Central Railroad Co. is reported to have purchased 100 acres of land between East Thomas and North Birmingham for freight-yards, etc. A. S. Baldwin is chief engineer at Chicago, Ill.

Brunswick, Md.—The Baltimore & Ohio Railroad has let contracts to improve its Brunswick yards. This will involve the building of a large addition to the present yard at an estimated cost of about \$1,000,000. D. D. Carothers is chief engineer at Baltimore.

Campbell, Mo.—W. E. Lasswell, president of the St. Louis, Kennett & Southeastern Railway, is reported as saying that the line will be changed to standard gauge and extended to Kennett. The present line is from Campbell, Mo., to Nimmons, Ark., 24 miles. James D. Mitchell is engineer.

Cannel City, Ky.—The Ohio & Licking Valley Railroad Co. proposes to build a line 72 miles long from Cannel City to Hillsboro, Ky., with a branch from Cannel City via Jackson to Elkhorn Creek coal fields. Woodson Poor, Cincinnati; R. H. Winn, Mount Sterling, Ky., and Robert Young of Farmers, Ky., are interested.

Chatham, Va.—Reported that the Southern Railway Co. is making a survey to improve its line by change of route from a point near Chatham to Galveston, Va., a distance of about eight or nine miles. W. H. Wells is engineer of construction, Washington, D. C.

Columbia, Miss.—Reported that the Gulf & Ship Island Railroad will build an extension from Columbia to Vicksburg, Miss. F. B. McCutcheon is chief engineer at Gulfport, Miss.

Danville, Ky.—Mr. John D. Follette, secretary of the Danville-Scottsville Railroad Co., 41 East 4th street, Cincinnati, Ohio, writes the Manufacturers' Record saying that the preliminary surveying and taking of rights of way are now being done.

Davis, I. T.—The Davis & Turner Falls Railroad Co. has been granted a charter for its proposed line, which will be about 10 miles long. The incorporators are R. H. Wilkin, A. L. Welsh, J. W. Grant, Robert Chowling, and W. L. Demeryx of Oklahoma City; John Watts of Newton, Kan.

Decatur, Ala.—Reported that Eastern and London capitalists are working on a plan to build a railroad from the Tennessee river to Mobile bay with branches to Birmingham, Decatur and Sheffield. It will also connect Moulton, Clear Creek Falls and Tuscaloosa. The backers are interested in coal and iron lands.

De Land, Fla.—Construction is reported begun on the De Land, Daytona & St. Johns River Railroad by W. H. McBride. The officers are: President, W. J. Morgan of Bellaire, Ohio; first vice-president, W. H. Cohan of Dawson, Pa.; second vice-president, J. H. Laughrey of Dawson, Pa.; secretary and treasurer, Charles S. Rieman of Daytona. Mr. Rieman will have charge of construction.

Emberville, Tenn.—Location surveys are reported finished for the Johnson City Southern Railway, which will extend from Emberville to Marion, N. C., 98 miles. Construction is under way on 22 miles east from Emberville.

Fayetteville, N. C.—President J. A. Mills of the Raleigh & Southport Railway is reported as saying that grading is finished to a point within three miles of Fayetteville, that track is laid to a point about six miles from the city, and it is expected to have trains running into Fayetteville by June 15.

Fort Worth, Texas.—The St. Louis & San Francisco Railroad proposes to increase its yard tracks in Fort Worth in connection with the building of new shops and roundhouse. J. F. Hinckley is chief engineer at St. Louis, Mo.

Gauley Bridge, W. Va.—The Fort Defiance Coal Co., in which T. R. Ragland and others are interested, will build a railroad from a connection with the Chesapeake & Ohio Railway to its proposed mine at Old Gauley.

Greenbrier, Tenn.—Reported that Major E. A. Wilson of Knoxville has nearly completed a contract for 25 miles of grading for the Louisville & Nashville Railroad between Greenbrier and Gutarie, Tenn.



Guthrie, O. T.—Survey is reported completed for the extension of the St. Louis, El Reno & Western Railway from El Reno into Texas. T. L. Wolf is general superintendent at Guthrie.

Hamlet, N. C.—Charles R. Capps, general freight agent of the Seaboard Air Line, is reported as saying that the company has plans to greatly enlarge the terminal facilities at Hamlet. W. L. Seddon is chief engineer at Portsmouth, Va.

Hattiesburg, Miss.—The Mississippi Central Railroad is reported to have completed its line to Brookhaven and will put it in service immediately.

Hot Springs, Ark.—Mr. James F. Read, president, writes from Fort Smith, Ark., to the Manufacturers' Record that the Hot Springs, Ouachita & Mena Railway Co. contemplates a line about 50 miles long from Hot Springs to a point near Black Springs. James B. McDonough is secretary and treasurer.

Jackson, Miss.—The New Orleans & Great Northern Railroad Co. is reported to have completed a survey from Monticello, Miss., to Jackson, Miss. J. F. Coleman is chief engineer, 920 Ilibernia Bank Building, New Orleans.

Knoxville, Tenn.—George W. Callahan of the Callahan Construction Co., contractor for the proposed Holston River Railway, says that work has begun, and he is further quoted as saying that the Virginia & Southwestern Railway, of which Henry K. McHarg is president, is back of the new line, which will be about 41 miles long from Persia, Tenn., to Yuma, Va., where connection will be made with the Virginia & Southwestern, that company building a short line there. J. R. Oates of Asheville, N. C., is said to have a subcontract on the line.

Lake Charles, La.—C. B. Sweet, vice-president of the Long-Bell Lumber Co., writes from Lufkin, Texas, to the Manufacturers' Record that the company is considering plans to build a standard-gauge railroad from the Ridder to Lake Charles, La.

Magnolia, Ark.—Reported that the Louisiana Northwestern Railroad will be extended via Natchitoches into the southern part of Louisiana. W. R. Haynes is superintendent at Magnolia.

Macon, Ga.—Reported that the Southern Railway Co. will considerably increase the size of its yards in Macon. W. H. Wells is engineer of construction, Washington, D. C.

McKinney, Texas.—Actual construction is reported begun on the proposed Texas, New Mexico & Pacific Railway, which is to extend from McKinney to Roswell, N. M. M. J. Healey is general manager at McKinney.

Mexia, Texas.—The Trinity & Brazos Valley Railway is being rapidly extended south from Mexia to Houston and from a point 14 miles east from Mexia through Corsicana and Waxahachie into Dallas. It is hoped to have the line completed into both Houston and Dallas by September 1. M. Sweeney is vice-president and general manager at Cleburne, Texas.

Mexia, Texas.—An officer of the Trinity & Brazos Valley Railway, referring to a recent press report, advises the Manufacturers' Record that he knows of no plan to build an extension from Bardwell to Ennis.

Meridian, Miss.—The Meridian & Tombigbee Railroad Co. has applied for incorporation to build a line from Meridian, Miss., to Natchez, Ala., and also northward from Meridian to Philadelphia, Miss., a total length of 80 miles. The incorporators are C. F. Woods, Frank Heiss, A. D. McRaven, J. W. McBeath, A. Poltevant, Dr. J. R. Phillips and others. Survey has begun and rights of way are nearly all secured. F. D. Harvey is engineer.

Morehead, Ky.—Reported that the Morehead & Northfork Railroad Co. will do its own construction for its 12-mile line excepting a contract for three miles, which includes a tunnel and which has been awarded. E. W. Hess is chief engineer.

Newcomb, Tenn.—John L. O'Connor is quoted as saying that he is pushing work on a contract to build two and one-half miles of railroad from Newcomb to the Woodridge mines.

New Orleans, La.—J. T. Harahan, second vice-president of the Illinois Central Railroad, is reported as saying that the yards at Harahan near New Orleans will be extended and enlarged. A. S. Baldwin, Jr., is chief engineer at Chicago.

Norfolk, Va.—The Norfolk, Portsmouth & Newport News Company has, it is reported, completed its extension to Churchland.

Oklahoma City, O. T.—Mr. Douglas B. Crane writes the Manufacturers' Record that the Oklahoma City & Shawnee Traction Co. proposes to build a line 40 miles long, including sidings, from Oklahoma City to Shawnee.

Two routes are under consideration, but it is not decided when construction bids will be opened. The directors are W. F. Young, president, Oklahoma City, O. T.; Sherman Collins, secretary and chairman executive board, Ithaca, N. Y.; O. P. Workman, treasurer, Oklahoma City, O. T.; Daniel Ketchum and William H. Crane, Adrian, Mich.; Douglas B. Crane and James B. Kinne, Oklahoma City, O. T.

Opelousas, La.—The Opelousas, Gulf & Northern Railroad Co. is reported to have filed a mortgage covering \$5,000,000 of 5 per cent. bonds on its line from Opelousas to the Mississippi river and also from Opelousas to the Gulf. Thomas H. Lewis of Opelousas is president. Robert Myrick, contractor, is quoted as saying that 30 miles of grade are completed on the line between Melville and Crowley.

Parkersburg, W. Va.—The Baltimore & Ohio Railroad Co. informs the Manufacturers' Record that about \$150,000 will be spent for improvements at Parkersburg, including an enlargement of the freight yard to more than double its present capacity. Bids will soon be requested and work started as soon as contract is awarded. D. D. Carothers, chief engineer, is in charge of the work.

Richwood, W. Va.—Reported that the J. M. Hastings Lumber Co. is building a steam railroad four miles long from Jacksonburg to Richwood.

Rogers, Ark.—The Rogers Southwestern Railway has begun tracklaying, and will, it is said, complete immediately 20 miles from Rogers to Springtown.

Roswell, Ga.—The Manufacturers' Record is informed that the Atlanta, Roswell & Cumming Electric Railroad & Power Co. proposes to build a railway from Roswell, on the Southern Railway, via Alpharetta to Cumming, Ga., about 20 miles, the line to be finally connected directly with Atlanta. Saxon A. Anderson, contractor, Marietta, Ga., writes that \$50,000 have been raised, and when the bonds are sold contract will be let. The bond issue is for \$250,000.

Roanoke, Va.—The Norfolk & Western Railway, it is reported, is about to let a contract for a cut-off between Forest and Concord. C. S. Churchill is chief engineer at Roanoke.

Ryan, I. T.—The Red River Traction & Power Co. is preparing to make a survey for an electric railway from Ryan to Marietta, I. T. It is also said that survey will be made from Lawton, O. T., to Denison, Texas.

San Antonio, Texas.—F. W. Weeks, chairman of the Texas Railway Co., writes the Manufacturers' Record confirming its report as to the route, and saying that the first division from Yoakum, Texas, to Port O'Connor, Texas, will probably be built first. The grade, 91 miles long, is ready for track. G. M. Duller is engineer, and it is intended to let construction contracts on or before June 1. The officers are M. Goggan, president; G. S. McFarland, vice-president; W. F. Rose, secretary; general office, San Antonio, Texas.

Stillmore, Ga.—Mr. George M. Brinson writes the Manufacturers' Record that engineers are now making a location survey for the proposed Brinson Railway between Savannah and Springfield, Ga., about 25 miles, on which construction will begin as soon as location is completed.

St. Petersburg, Fla.—The St. Petersburg & Gulf Railway has elected officers as follows: William E. Heathcote, president; J. F. Harrison, secretary; T. K. Wilson, treasurer; F. A. Wood, R. H. Thomas, Noel A. Mitchell, C. A. Harvey, Cyrus S. Detre, R. S. Hanna, directors.

Tampa, Fla.—Mr. T. M. Wier informs the Manufacturers' Record that application will be made to the next legislature for a charter to build a railroad and an automobile road from Tampa to the most accessible point on the east coast of Florida. Preliminary work is now being done.

Tellico Plains, Tenn.—The Manufacturers' Record is informed that the Tellico River Lumber Co. has graded four miles of railroad and has begun laying track. The road will be constructed in three sections of eight miles each, as demands for timber increase. Possibly the line will be extended to Robinsville, N. C.

Texarkana, Ark.—W. T. Tyler, general manager of the Louisiana & Arkansas Railroad, is reported as saying that the extension into Alexandria, La., has been completed, and that rapid progress is being made on the further extension to Natchez, Miss.

Waycross, Ga.—The Waycross, Baxley & Vidalia Railroad Co. has filed its charter with the secretary of State to build a line about 55 miles long from Vidalia, Ga., via Baxley to Waycross, Ga. The incorporators are W. H. Buchanan, George W. Deen, J. M. Cox, W. R. Beach, Benjamin G. Parks, John T. Myers and J. S. Bailey of Waycross, C.

W. Deen of Baxley, C. G. Edwards of Savannah, J. E. Melton of Blarney, W. T. McArthur and George M. Mathews of Vidalia.

Williamson, W. Va.—J. K. Anderson of Williamson is reported to be pushing construction on the Tug River & Ben Creek Railway from Wharnciffe to the mouth of Gilbert creek, about 50 miles.

Wilmington, N. C.—The Atlantic Coast Line proposes to increase its freight-yards at Wilmington from a capacity of 600 cars to fully 2000 cars, work to begin immediately. E. B. Plessants is chief engineer at Wilmington.

#### Street Railways.

Asheville, N. C.—Green & Thrash are reported to be working on a plan to secure a street-railway extension into West Asheville and to Sulphur Springs, three miles.

Beaumont, Texas.—Frank J. Duffey, manager of the Beaumont Traction Co., is reported as saying that he does not know when construction will begin on the extension from Park street through the Joachim addition, for which franchise has been granted.

Louisville, Ky.—T. J. Minary, president of the Louisville Railway Co., is reported as saying that it appears now that the Fern Creek extension will certainly be built. It will require about five miles of track.

Mineral Wells, Texas.—J. D. Beardsley of Gilsland, La., will, it is reported, make preliminary survey for the proposed street railway in Mineral Wells, which it is expected to complete ready for operation by autumn.

Roanoke, Va.—The Roanoke Street Railway Co. has applied for a franchise to build an extension about a mile long and also for a short extension of two blocks on the Belmont line. About three miles of track will be relaid with heavy rail.

St. Louis, Mo.—The St. Louis Suburban Railway proposes to build an extension to Maplewood.

Yellville, Ark.—C. L. Morgan of Detroit, Mich., has applied for a street-railway franchise to Yellville, and also proposes to build the line to Kingdon Springs and Buffalo river.

#### MACHINERY, PROPOSALS AND SUPPLIES WANTED.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery that is wanted.

Agricultural Implements, etc.—Shenandoah Machine & Plumbing Co., Shenandoah, Va., wants to secure the agency for wagons, farming machinery, oils, etc.

Art Glass.—See "Church Furniture."

Awnings.—Tarboro Cotton Factory, J. W. Jones, secretary, Tarboro, N. C., wants catalogues from manufacturers of awnings.

Belting Machinery.—V. J. Guthery, care Charlotte Leather Belting Co., Charlotte, N. C., wants machinery for making leather belting.

Boiler.—Roland Park Company, Roland Park, Baltimore, Md., wants one or two boilers 150 to 200 horse-power; second-hand. (See "Pumping Plant.")

Boiler.—Birmingham Metal Bed Manufacturing Co., Birmingham, Ala., wants boiler.

Boiler.—Chamberlin Mineral Co., 606 F street N. W., Washington, D. C., wants a 150-horse-power boiler. (See "Engine and Boiler.")

Boiler.—See "Engine and Boiler."

Boiler.—W. H. Crawford, president Tennessee-Kentucky Tobacco Co., No. 716 First National Bank Building, Nashville, Tenn., wants a 50-horse-power tubular boiler. (See "Engine and Boiler.")

Boiler.—Harry B. Day, New Madrid, Mo., wants a 100-horse-power boiler. (See "Engine and Boiler.")

Boiler.—Lagrange Tobacco Stemmy, Lagrange, N. C., wants a 40-horse-power boiler. (See "Engine and Boiler.")

Boilers.—Morris Mining Co., Morrisville, Ala., wants 125-horse-power boiler, 100 pounds working pressure, and 100-horse-power boiler, 125 pounds working pressure. Quote price

and send descriptive circular. (See "Engine and Boilers.")

Boilers.—See "Water-works, etc."

Boilers.—Baker Lumber Co., Berryville, Ark., wants two 60 to 80-horse-power tubular boilers. (See "Engines and Boilers.")

Brick Machinery.—Concrete Construction & Contracting Co., 325 Camp street, New Orleans, La., wants catalogues and prices on brick machinery.

Brick Machinery.—Virginia Granolithic Building Block Co., 1321 West Main street, Richmond, Va., will want machinery for making sand-lime brick.

Brick Machinery.—J. A. Broadus, secretary Clement Brick & Tile Co., Biloxi, Miss., wants brick machinery.

Brick Machinery.—Waynesboro Brick & Manufacturing Co., Waynesboro, Miss., wants prices on brick machinery.

Bridge Construction.—W. P. Gresham, clerk, Indianola, Miss., will open bids May 8 for building a steel drawbridge across the Sunflower river according to plans by the Joliet (Ill.) Bridge & Iron Co., which will furnish blueprints on application.

Bridges.—See "Levee Work."

Building Material.—Reed Lumber & Coal Co., Reed, O. T., wants prices on building material.

Building Materials.—A. St. C. Dunstan, electrical engineer, Alabama Polytechnic Institute, Auburn, Ala., wants cement, steel for reinforced concrete.

Building Materials.—Willis & Mason, 321 West Biddle street, Baltimore, Md., want bids on ornamental plastering.

Building Materials.—Big Brushy Coal & Coke Co., Petros, Tenn., wants addresses of manufacturers of wireglass, iron window frames and concrete-floor contractors.

Building Materials.—Concrete Construction & Contracting Co., 325 Camp street, New Orleans, La., wants catalogues and prices on Portland cements, vitrified brick and Belgian or granite paving blocks.

Building Materials.—W. W. Price, clerk of school board, Wetumka, I. T., wants all material and supplies for erection of eight-room modern school building.

Cable.—See "Mining Equipment."

Cement-block Machinery.—W. G. Carey, Buena Vista, Ga., wants cement-block machinery.

Church Furniture.—W. W. Bateman, chairman building committee Baptist Church, Wauchula, Fla., wants prices on colored windows and pews.

Circular Saw.—See "Mining Equipment."

Clay-products Machinery.—C. G. Wiggins, Buena Vista, Ga., wants machinery for making clay pipes or other white-clay products.

Coal.—Reed Lumber & Coal Co., Reed, O. T., wants prices on coal.

Concrete-block Machinery.—Concrete Construction & Contracting Co., 325 Camp street, New Orleans, La., wants catalogues and prices on concrete-block machinery.

Concrete Mixer.—West Richardson, Newport News, Va., wants concrete mixer.

Concrete Mixers.—Concrete Construction & Contracting Co., 325 Camp street, New Orleans, La., wants catalogues and prices on concrete mixers.

Concrete Mixer.—General Engineering & Supply Co., Colorado Building, Washington, D. C., wants a Smith concrete mixer, three-quarter-yard capacity, new or second-hand.

Concrete-products Machinery.—William W. Boone, 104 East Lexington street, Baltimore, Md., wants addresses of manufacturers of concrete machinery for making sewer pipe, flues, chimneys, etc.

Copper Slab.—I. S. F., care of Manufacturers' Record, Baltimore, Md., wants a slab of copper for toboggan, 25 or 30 feet long and 2½ feet wide.

Cotton-duck Curtains.—John H. Sizer Lumber Co., Cebu, S. C., wants 14 curtains, 12 feet by 16 inches, of heavy cotton duck.

Cotton Mill.—G. W. Ford, Louisville, N. C., wants to negotiate for equipment of 5000-spindle mill, steam power included.

Cotton-mill Machinery.—Vardry Cotton Mills, L. M. McBe, president, Greenville, S. C., will need full equipment for 5000 spindles, accompanying machinery, dyeing plant, etc., excepting power apparatus.

Cotton-mill Machinery.—H. C. Townsend, Anderson, S. C., will be in the market for cotton machinery (probably about 2250 ring spindles), electric motor, shafting, belting, etc.

Cotton-rope Machinery.—Cherokee Water Mills, Rome, Ga., wants machinery for manufacturing cotton rope and twine.

Cotton-rope Machinery.—W. O. Kenan, Selma, Ala., wants to correspond with manu-

facturers of cotton rope and twine machinery.

**Crusher.**—Morris Mining Co., Morrisville, Ala., wants catalogue and price-list of Austin or Gates crusher, No. 5 or No. 6; new or second-hand in good condition.

**Dredging Plant.**—Bids will be received until June 6 at office of Public Works, Santa Isabel and Compostela streets, Matanzas, Cuba, for dredging plant composed of dredge with an eight-yard shovel and steel hull, four wooden scows of 500 cubic yards capacity each, steel steam tug, wooden coaling barge of 200 tons, wooden floating water tank of 42,500 gallons capacity, steel floating derrick of 40 tons and naphtha launch of 20 horse-power. Specifications, blank forms and all necessary information furnished at office of Public Works and at the general direction of Public Works, Arsenal, Havana; Salvador Guastella, chief engineer.

**Dye-works Equipment.**—B. Montiegel, Wheeling, W. Va., wants machinery for dyeing, dry-cleaning, drying, etc.

**Dyeing Machinery.**—Vardry Cotton Mills, L. M. McRee, president, Greenville, S. C., will need dyeing plant for 5000-spindle mill.

**Electrical Equipment.**—V. J. Guthery, care Charlotte Leather Belting Co., Charlotte, N. C., wants motors and other electrical equipment.

**Electrical Equipment.**—A. St. C. Dunstan, electrical engineer, Alabama Polytechnic Institute, Auburn, Ala., wants alternating-current switchboard.

**Electrical Equipment.**—Gulf Fertilizer Co., Tampa, Fla., wants electric motor.

**Electrical Equipment.**—Banner Sash & Door Co., 8025 South Broadway, St. Louis, Mo., wants electric motors, gas or gasoline engine and equipment. (See "Engine.")

**Electrical Equipment.**—Thomas Purvis, 23d street and Twenty-eighth avenue, North Birmingham, Ala., wants dynamo.

**Electrical Equipment.**—Birmingham Metal Bed Manufacturing Co., Birmingham, Ala., wants electric motors.

**Electrical Equipment.**—Chamberlin Mineral Co., 606 F street N. W., Washington, D. C., wants 10-horse-power dynamo for lighting.

**Electrical Equipment.**—Harry B. Day, New Madrid, Mo., wants 75-kilowatt generator, 220 volts D. C.

**Electrical Equipment.**—Owensboro Planing Mill Co., Owensboro, Ky., wants dynamo and motors.

**Electrical Equipment.**—Waynesboro Brick & Manufacturing Co., Waynesboro, Miss., wants dynamo and wire for 1000-light plant.

**Electrical Equipment.**—Farmers' Mutual Exchange of Frederick County, Myersville, Md., wants electric motor or gasoline engine. (See "Engine.")

**Electrical Supplies.**—Empire Furniture Co., Brownwood, Texas, wants electrical supplies.

**Electric-light Plant.**—Bon Aqua Springs Co., Dean & Walker, managers, Bon Aqua, Tenn., wants complete electric-light plant of 500 lights capacity.

**Electric-light Plant.**—See "Water-works, etc."

**Elevator Equipment.**—Farmers' Mutual Exchange of Frederick County, Myersville, Md., wants equipment for grain elevator.

**Engine.**—See "Water-works, etc."

**Engine.**—G. V. Halder, White Oak, N. C., wants a new or second-hand 15 to 20-horse-power engine.

**Engine.**—Farmers' Mutual Exchange of Frederick County, Myersville, Md., wants gasoline engine or electric motor. (See "Electrical Equipment.")

**Engine.**—Banner Sash & Door Co., 8025 South Broadway, St. Louis, Mo., wants gas or gasoline engine or electric motors and equipment. (See "Electrical Equipment.")

**Engine.**—Cynthiana Overall Co., Cynthiana, Ky., wants a gasoline engine.

**Engine.**—Empire Furniture Co., Brownwood, Texas, wants gas engine.

**Engine and Boiler.**—Lagrange Tobacco Stemmer, Lagrange, N. C., wants a 20-horse-power engine and 40-horse-power boiler.

**Engine and Boiler.**—Waynesboro Brick & Manufacturing Co., Waynesboro, Miss., wants prices on engine and boiler.

**Engine and Boiler.**—Harry B. Day, New Madrid, Mo., wants engine, to be direct connected to a 75-kilowatt generator, 220 volts D. C., and a 100-horse-power boiler.

**Engine and Boiler.**—Chamberlin Mineral Co., 606 F street N. W., Washington, D. C., wants 60 horse-power engine and 150-horse-power boiler.

**Engine and Boiler.**—W. H. Crawford, president Tennessee-Kentucky Tobacco Co., No. 715 First National Bank Building, Nashville,

Tenn., wants a 30-horse-power steam engine and 50-horse-power tubular boiler.

**Engine and Boilers.**—Morris Mining Co., Morrisville, Ala., wants 75-horse-power slide-valve engine, 125-horse-power boiler, 100 pounds working pressure, and 100-horse-power boiler, 125 pounds working pressure. Quote prices and send descriptive catalogue; new or second-hand in good condition.

**Engines.**—Thomas Purvis, 23d street and Twenty-eighth avenue, North Birmingham, Ala., wants three gasoline engines.

**Engines and Boilers.**—Baker Lumber Co., Berryville, Ark., wants two engines, self-contained side crank, one 45 horse-power and one 60 horse-power, and two 60 to 80-horse-power tubular boilers.

**Filtration Plant.**—City of Manchester, Va., will receive bids until May 15 for gravity filtration plant to be used in connection with present water system and with proper connections for that purpose; plant to have a capacity of 2,000,000 gallons daily, constructed of reinforced concrete, except the necessary buildings in connection therewith, which shall be of brick with slate roof. All bids must be accompanied with detailed plans and specifications and a certified check for \$1000. Usual rights reserved; Matthew Morton, secretary.

**Foundry and Machine Equipment.**—James Lee Shelton, Rooms 1 and 1½ Shafer Building, Richmond, Va., wants estimates on complete equipment for foundry and machine shop of sufficient capacity to build turbine water-wheels up to 66 inches in diameter, and iron penstocks and flumes for same.

**Foundry Equipment.**—Shenandoah Machine & Plumbing Co., Shenandoah, Va., wants a small cupola, blower, forge, anvil, tongs, etc.

**Knitting Machinery.**—W. P. Cline, Hickory, N. C., wants machinery for hosiery mill.

**Foundry Equipment.**—Phoenix Electric Co., Mansfield, Ohio, wants a second-hand cupola, two to five tons, and blower; second-hand punching press for blanking out armature discs.

**Foundry Equipment.**—Abner Doble Company, 2611 Broadway, San Francisco, Cal., wants catalogues and price-lists of foundry and machine equipment, supplies, etc.

**Grinders.**—Baker Lumber Co., Berryville, Ark., wants emery automatic knife grinders, etc.

**Ice Plant.**—T. R. Corder, Pulaski, Va., wants prices on complete equipment for three to five-ton ice plant; new or second-hand in good condition.

**Foundry Supplies.**—Thomas Purvis, 23d street and Twenty-eighth avenue, North Birmingham, Ala., wants foundry supplies.

**Gas Apparatus.**—Amarillo Gas Co., Amarillo, Texas, wants gas apparatus, purifiers, etc., for plant with a daily capacity of 50,000 to 75,000 cubic feet.

**Gas Plant.**—Southern Gas Co., 69 Inman Building, Atlanta, Ga., will want full equipment for gas plant, including holder, pipe and tools, when franchise is granted.

**Grinding Mill.**—North Carolina Mica & Monazite Co., R. F. D. No. 2, Lawndale, N. C., wants a small mill for grinding mica.

**Heating Apparatus.**—School Board, South McAlester, I. T., wants to correspond with manufacturers of fan systems of heating.

**Hoisting Engine.**—See "Mining Equipment," ment."

**Iron and Steel.**—Southwestern Mine & Mill Supply Co., 306-308 South 5th street, Fort Smith, Ark., wants bar iron and steel.

**Laundry Machinery.**—James M. Heard, De Land, Fla., wants complete equipment for steam laundry.

**Lighthouse Supplies.**—Sealed proposals will be received until May 3 at the office of Lieut. Col. R. L. Hoxie, lighthouse engineer, Baltimore, Md., for furnishing annual lighthouse supplies as follows: Anthracite and bituminous coal, hardware, tools, etc., lumber, provisions, ship chandlery, tin and galvanized iron, in accordance with specifications which may be obtained from the office of the engineer.

**Levee Work.**—J. O. Ramey, clerk board of supervisors Lafayette county, Oxford, Miss., will receive bids until May 8 for construction of a levee (30,000 cubic yards, more or less) and building bridges of said levee (1100 feet, more or less), and flooring the iron bridges across Tallahatchie river (148 feet) on the Memphis and Coffeeville public roads, links Nos. 72 and 77, in Lafayette county, Mississippi, about 13 miles northwest of Oxford. Board of supervisors reserves usual rights.

**Logging Wagons.**—See "Wagons."

**Lumber.**—Reed Lumber & Coal Co., Reed, O. T., wants prices on lumber.

**Machinery for Exhibits.**—International & Industrial Exhibition & Sale Co., Amster-

dam, Holland, wants permanent exhibits from manufacturers and agents planning to introduce their machinery in the Netherlands and throughout Europe. Baron W. Van Ittersum, Hotel Martinique, New York city, is representing the company.

**Machine Tools.**—Southwestern Mine & Mill Supply Co., 306-308 South 5th street, Fort Smith, Ark., wants power punch and shear.

**Machine Tools.**—See "Foundry and Machine Equipment."

**Machine Tools.**—Birmingham Metal Bed Manufacturing Co., Birmingham, Ala., wants drill presses, surface grinder, shaper, lathe, punches.

**Machine Tools.**—Shenandoah Machine & Plumbing Co., Shenandoah, Va., wants a good second-hand lathe 20 inches or 22 inches by 18 inches or 20 inches, screw cutting.

**Machine Tools.**—Thomas Purvis, 23d street and Twenty-eighth avenue, North Birmingham, Ala., wants small bench drills.

**Machine Tools.**—Bids will be received until May 22 at the bureau of supplies and accounts, Navy Department, Washington, D. C., for furnishing at the navy-yards at Portsmouth, N. H.; Boston, Mass.; New York, N. Y.; League Island, Pa.; and Norfolk, Va., as specified, a quantity of machine tools, etc., as follows: Pneumatic punches, lathes, index centers, paper cutter, molder, drill presses, forming press, turret machine, steam hammer, die sinker, trimming press, electric deck planers, shears, pipe expander, metal saw and castings for cranes. Applications for proposals should refer to Schedule 524. Blank proposals furnished on application to the navy pay office, New York, N. Y., or to the bureau; H. T. B. Harris, paymaster-general, United States navy.

**Mill Supplies.**—V. J. Guthery, care Charlotte Leather Belting Co., Charlotte, N. C., wants pulleys, hangers and shafting.

**Mining Equipment.**—North Carolina Mica & Monazite Co., R. F. D. No. 2, Lawndale, N. C., wants bids on hoisting engine with boilers, feed pump, capacity 400 to 1000 pounds, mining water buckets and special heavy sheaves corresponding with hoist, all necessary cable for hoist, and a circular-saw device to attach to the hoisting engine.

**Mining Equipment.**—Chamberlin Mineral Co., 606 F street N. W., Washington, D. C., wants rock crusher, two sets rolls, cooly jigs, etc.

**Mining Supplies.**—Goff Coal Co., Williamson, W. Va., wants wire rope, steel rails and mine cars.

**Oil Mill.**—Farmers' Oil & Fertilizer Co., Dawson, Ga., wants to correspond with a practical engineer relative to plans and specifications for buildings and equipment for a 150-barrel cottonseed-oil mill.

**Oiling System.**—A. St. C. Dunstan, electrical engineer, Alabama Polytechnic Institute, Auburn, Ala., wants oiling system and filters.

**Paving.**—Sealed proposals, addressed to the Board of Awards, Baltimore, Md., will be received until May 16 at the office of Harry F. Hooper, city register, City Hall, to grade, curb and pave with treated wood blocks a number of streets in the city. Specifications and proposal sheets may be obtained from office of B. T. Fendall, city engineer, City Hall.

**Paving Materials, Piping, etc.**—Henry B. F. Macfarland, Henry L. West and Chester Harding (acting), commissioners, Washington, D. C., will receive bids until May 25 for furnishing granite curbing, asphalt paving blocks, red sewer bricks, terra-cotta sewer pipe and branches, repressed vitrified sewer invert bricks, vitrified sewer invert blocks, vitrified paving blocks, Portland cement, miscellaneous castings, and hauling cast-iron water pipe, broken stone, paving blocks and bricks, sand and gravel and granite curbing for fiscal year ending June 30, 1907. Specifications, blank forms of proposal and information on application.

**Pipe Organ.**—Presbyterian Church, Palatka, Fla., will probably purchase two-manual pipe organ, either new or second-hand. Address S. G. Barstow.

**Piping.**—A. St. C. Dunstan, electrical engineer, Alabama Polytechnic Institute, Auburn, Ala., wants six-inch wrought-iron steam piping and fittings, eight-inch spiral-ribbed exhaust pipe and fittings, exhaust head.

**Piping.**—Roland Park Company, Roland Park, Baltimore, Md., wants 1000 feet 8-inch and 1500 feet 10-inch wrought-iron pipe (threaded or flanged) for 150 pounds working pressure; second-hand.

**Piping.**—See "Water-works, etc."

**Piping.**—Morris Mining Co., Morrisville, Ala., wants 7000 feet of new or second-hand six-inch wrought or cast-iron pipe. Quote price and send descriptive circular.

**Piping, etc.**—Adam A. Umholts, engineer, Suffolk, Va., wants prices on carload quanti-

ties of 4x3 pipe, malleable galvanized fittings, by the ton, pound rate, all f. o. b. Suffolk.

**Piping, etc.**—Southwestern Mine & Mill Supply Co., 306-308 South 5th street, Fort Smith, Ark., wants wrought-iron pipe and fittings and supplies.

**Planing Mill.**—Kling & Frazier, Hazlehurst, Ga., wants machinery for planing mill.

**Plumbing Supplies.**—Gleason Water & Lighting Co., Gleason, Tenn., will probably shortly want bathroom outfits.

**Plumbing Supplies.**—Shenandoah Machine & Plumbing Co., Shenandoah, Va., wants to secure the agency for plumbing supplies.

**Polishing Machinery.**—Consolidated Granite Co., Winston-Salem, N. C., wants machinery for polishing granite.

**Producer-gas Plant.**—Summers Printing Co., 17 South Howard street, Baltimore, Md., is considering installation of producer-gas plant, and wants bids on necessary equipment.

**Pumping Plant.**—Roland Park Company, Roland Park, Baltimore, Md., wants two second-hand pumping engines, each with capacity of 800 to 1000 gallons per minute under 150 pounds working pressure, 100 pounds steam; also second-hand 150 to 200-horse-power boiler capacity (one or two boilers) to operate engines.

**Pumps.**—See "Water-works, etc."

**Quarrying Equipment.**—Consolidated Granite Co., Winston-Salem, N. C., will want machinery for quarrying and polishing granite.

**Railway Equipment.**—J. M. Wolford, 108 Plume street, Norfolk, Va., wants about three miles of 26-pound rails, either new or second-hand, and a 20-horse-power gasoline locomotive.

**Railway Equipment.**—J. M. Russ Lumber Co., Collins, Miss., wants for immediate shipment one-half mile new or good relay 30-pound steel rail.

**Railway Equipment.**—Texas Railway Co., F. W. Weeks, chairman, San Antonio, Texas, will want to purchase railway equipment about June 1.

**Railway Equipment.**—See "Mining Supplies."

**Railway Equipment.**—H. H. Deen, Gainesville, Ga., will probably want one or two traction engines.

**Roofing.**—Empire Furniture Co., Brownwood, Texas, wants roofing material.

**Saw-mill.**—H. H. Deen, Gainesville, Ga., wants estimates on saw-mill machinery, 20,000 to 25,000 feet daily capacity.

**Saw-mill Machinery.**—J. T. Boyd, Loneoke, Ark., wants a 30-inch gang edger and one double-friction log turner.

**Seating.**—See "Church Furniture."

**Sewerage System.**—Bids addressed to L. Hilton Green, chairman board of bond trustees, Pensacola, Fla., and marked "Proposals for Constructing Drainage and Sewerage System," will be received until June 1 for constructing system of storm-water drains and sanitary sewers; work to be done consists of approximately 25,000 lineal feet of storm-water drains from 66 to 10 inches in diameter, which will comprise Section 1. Section 2 will consist of approximately 42 miles of terra-cotta and cast-iron pipe sewers from 24 to 6 inches in diameter. Proposals for Section 1 must be accompanied by a certified check for \$3000 and proposals for Section 2 must be accompanied by a certified check for \$3000, both checks made payable to the board of bond trustees. Specifications and blank forms of proposal can be obtained of either L. Hilton Green, Pensacola, or of T. Chalkley Hatton, engineer, 608 Market street, Wilmington, Del., and full sets of plans can be obtained at the engineer's office on deposit of \$10. Usual rights reserved.

**Sewerage System.**—Henry B. F. Macfarland, Henry L. West and Chester Harding (acting), commissioners, Washington, D. C., will receive bids until May 14 for constructing sewer. Specifications and blank forms of proposal on application. Usual rights reserved.

**Street Sprinkler.**—Town of Rocky Mount, N. C., wants estimates as to cost of one one-horse street sprinkler. Address J. H. Cuthrell, chief of fire department.

**Tank and Tower.**—See "Water-works, etc."

**Telephone Equipment.**—Norman T. McManaway, secretary Caroline County Telephone Co., Bowling Green, Va., wants equipment for 100 miles of telephone, including phones, etc.

**Tobacco Dryer.**—Lagrange Tobacco Stemmer, Lagrange, N. C., wants an automatic tobacco dryer; capacity 8000 pounds daily.

**Wagons.**—Baker Lumber Co., Berryville, Ark., wants five good log wagons and 10 good road wagons.

**Water-works, etc.**—City of Clinton, S. C., will receive bids until May 29 for water-



works and electric-light plant, including boilers, duplex pumps, deep-well pump, steel tank and tower, about four miles of cast-iron pipe (six to ten inches), hydrants and valves, 70-horse-power engine, 45-kilowatt generator, transformer, switchboard, arc lamps and wire; plans and specifications on file in office of water-works commissioners and Charles C. Wilson, consulting engineer, 1302 Main street, Columbia, S. C. Certified check for 2 per cent. of amount of bid must accompany each proposal. Usual rights reserved; J. A. Bailey, J. T. Robertson, R. Z. Wright, water-works commission.

**Water-works Equipment.**—Gleason Water & Lighting Co., Gleason, Tenn., will want pipes, two-inch, galvanized, with valves, crosses, fittings, hydrants, etc.

**Woodworking Machinery.**—Baker Lumber Co., Berryville, Ark., wants complete equip-

ment for saw and planing mill, including 25,000-foot capacity circular saw rig complete with side-edger, two-saw trimmer, log turner, one four-side 6x20-inch planer and matcher (heavy), one four-side 12-inch outside moulder, one self-feed rip saw, one 30-inch resaw, one single surfacer, one swing cut-off saw, one turning lathe; new or good second-hand.

**Woodworking Machinery.**—Variety Works Co., Dawson, Ga., wants shaper, wood planer and resawing machine.

**Woodworking Machinery.**—R. B. Tyler, Louisville, Ky., wants machinery for manufacture of small woodwork, such as step-ladders, yardsticks, rulers, etc.

**Woodworking Machinery.**—McGee Bros., Hines, Ala., want machinery for making round hollow columns, turning lathes and flooring machines.

every 24 hours, is equipped with modern machinery for economical production, and is located near Atlanta. There is said to be a ready sale for the product. For particulars address the Capital City Brick Co., Atlanta, Ga.

#### A Water-Power Proposition.

A proposition involving the development of a water-power property is now available. It is involved in the offer of T. S. Wells of Cornelia, Ga., to sell a water-power property or give half-interest to company that will develop the power. Mr. Wells states that the proposition will prove a good investment. Write him for details.

#### Concrete Piping Ordered.

The Reinforced Concrete Pipe Co. of Jackson, Mich., has secured a contract for 30-inch pipe to be used for the Ann Arbor (Mich.) city sewer. It also received contracts from the Pennsylvania Railroad Co. for a lot of 36-inch pipe, and from the Chicago, Milwaukee & St. Paul Railroad Co. for 36-inch, 48-inch and 60-inch pipe.

#### Stanley-G. I. in California.

In order to assist in rehabilitating the city of San Francisco, Cal., the Stanley-G. I. Electric Manufacturing Co. of Pittsfield, Mass., has established temporary offices at 67 Blake Block, Oakland, Cal. Several carloads of electrical apparatus are now on their way to take the place of machinery destroyed in the California disaster.

#### Alabama Land for Development.

A tract of 10,400 acres of cut-over land in Alabama is offered for sale. It is stated that these lands are bounded by a railway on one side and a river on the other side. They are located 40 miles from Mobile in a thickly settled country where land values are reported as increasing. For full information address Messrs. Sossaman & Costello, Box 634, Mobile, Ala.

#### To Represent Electrical Manufacturers.

Well-known Eastern manufacturers of dynamos and motors want to make arrangements with a salesman well acquainted with the electrical trade in the Southern States to handle their apparatus. A satisfactory proposition will be made to the proper man. Address "Electric Representative," care Manufacturers' Record.

#### A Manufacturing Opportunity.

A salesman who has for six years represented a Northern manufacturing plant is desirous of enlisting capital to enable him to purchase the enterprise. It is said that this offers a good opportunity for some progressive Southern city to secure the location of the plant by assisting in the purchase. From \$50,000 to \$100,000 is required. For information address J. T. McG., care of Manufacturers' Record.

#### Contracts for Oil Engines.

An increasing demand for the Hornsby-Akroyd oil engine is indicated in orders being received by the manufacturer, the De La Vergne Machine Co., foot of East 138th street, New York city. This company's most recent contracts include a refrigerating machine and a 7-horse-power and a 13-horse-power oil engine from John B. Eyres of Paterson, N. J., and a refrigerating machine and a 25-horse-power engine from Burk Bros. & Co. of Kirksville, Mo.

#### Baldwin Steel Co.

A change of address is announced by the Baldwin Steel Co. of New York city. This company removed on May 1 its offices in New York city from 107 John street to 133 Reade street. It manufactures high-grade crucible steels, and the Manufacturers' Record gave particulars regarding the decision of the managers of the company to build a large steel plant at Charleston, W. Va. It is understood that the construction work is about to begin.

#### More Lima Locomotives Sold.

The demand for Shay locomotives steadily continues. The manufacturer of these engines received during the past week contract for a 60-ton Shay for the Globe Lumber Co., Yellow Pine, La.; 37-ton Shay for Clark Creek Logging Co. of Catlin, Wash.; 28-ton Shay for Oak Point (Wash.) Piling & Lumber Co., and a 10x16 six-wheel switcher for J. H. Weinkle of Moffitt, Fla. These locomotives are built by the Lima Locomotive & Machine Co. of Lima, Ohio.

#### Convenient for Business Offices.

Modern ingenuity presents many efficient helps for the conduct of business in offices. One of the details of office work is the sealing and stamping of envelopes. Doing this

with the mouth and tongue is an awkward and slow way, and a little device is offered for the purpose by the Unique Water Pad Co. of Asheville, N. C. This company's unique water pad is used for moistening all gum surfaces, as well as envelopes. Its convenience is steadily increasing the demand for the device. Write the company for description.

#### Improving the Whiting Plant.

Some important improvements are now in progress at the plant of the Whiting Foundry Equipment Co., Harvey, Ill., a suburb of Chicago. The extensions comprise a new pattern shop 44x96 feet and an addition 52x130 feet to the machine shop. The latter will give additional shipping facilities, permitting two tracks to cut through the shops and facilitating the loading of electric traveling cranes and equipment of heavy capacities. These improvements have been made necessary by the steadily-increasing business which this company is handling.

#### Amsterdam Wants Permanent Exhibits.

American manufacturers and others interested in the introduction of American manufactured products into European countries are invited to investigate the plans of the International & Industrial Exhibition & Sale Co. of Amsterdam, Holland. This company has main offices and exhibition building at Amsterdam, also agencies throughout the Netherlands, and intends to establish branches in the principal European cities. It is represented by Baron W. Van Itersum, Hotel Martinique, New York city, who can be addressed for information.

#### Demand for Climax Locomotives.

The lumbering industry is calling for a large amount of machinery and accompanying equipment, especially for locomotives. This trade is being met by the representative manufacturers of the country, among whom may be named the Climax Manufacturing Co. of Corry, Pa. This company has recently sold many Climax locomotives, including six more of the 65-ton class to the New Orleans Great Northern Railroad Co., owned by the F. H. & C. W. Goodyear Company of Buffalo, N. Y.; a 45-ton locomotive to the Skykomish (Wash.) Lumber Co.; a 40-ton locomotive to the William Irvin Company of Big Run, Pa., and a 30-ton locomotive to the W. P. Zartman Lumber Co. of Tuscarora. The Climax manufactures include tramway locomotives, logging cars, drilling and pumping engines, and double-cylinder high-speed engines.

#### Whitewashing and Painting Machines.

The general cleaning up and painting of manufacturing structures, as well as other buildings, is greatly facilitated nowadays by the use of modern whitewashing and painting machines. These devices enable one or two men to do the work which by hand methods would require a half-dozen men and more. They save largely, and owners of all kinds of buildings have discovered this to their decided advantage. The result is that many machines for whitewashing, paint and other coatings are on the market. Among the successful equipments of this character is the Star whitewashing and painting machine, manufactured by the Star Brass Works, 152 Lake street, Chicago, Ill. The company has issued an interesting illustrated booklet giving all details about its specialties. Inquiries are invited.

#### Saturn Sempaste Paint.

Because of the unusual building activity prevailing at present, as well as the improvement of structures already in position, there is a large and increasing demand for paint. Manufacturers of paints are acquainted with this situation, and their plants are busily engaged in meeting the needs of dealers and users in the South and elsewhere. It is interesting at this time to call attention to the products of the Atlantic Paint Works of Baltimore, Md. This company is well known and becoming better known every day for its special product, the Saturn sempaste paint. This paint is said not to be excelled for durability, covering capacity and beauty of finish. It is prepared in packages ready for mixing with linseed oil, one gallon of the paint requiring an equal quantity of oil, and it is stated that the two gallons of paint thus provided is equal to any other paint manufactured and at a cost which is worth investigation. The Atlantic Paint Works issues an illustrated folder which presents some interesting facts regarding its products, including samples of 36 colors and references to the fact that any special shades can be secured.

#### Superior Portland Cement Co.

The Manufacturers' Record has received details of an extensive Portland-cement plant,

## SOUTHERN CITY INDUSTRIAL NOTES

[Special Correspondence Manufacturers' Record.]

Live Oak, Fla., April 26.

This little city is one of the most progressive municipalities of Florida. Its many natural advantages, central location and railroad facilities contribute to make it an attractive point for the homeseeker, investor and manufacturer. The opportunities for factories include an opening for a cotton and cotton-oil mill, a paper mill, a hardwood shop of large proportions, a knitting mill, a furniture factory and a tannery. There is also an urgent need for a good hotel. Here is a rapidly-developing city of 7000 inhabitants where the traveling man is at times unable to secure hotel accommodations, and when he does secure them the service is disappointing. Some of the leading business men stand ready to take stock in a \$50,000 to \$75,000 hotel. There are few cities which offer such good opportunities for barrel and box manufacture as does Live Oak, situated in the very heart of a rich timber section, a few miles from the Gulf and in the center of Florida—an ideal distributing point. Live Oak's interests as a business community are being ably promoted by the Board of Trade, an organization which is composed of energetic men engaged in various enterprises here. Its officers are W. J. Hillman, president; C. A. Brown and C. D. Blackwell, vice-presidents, and C. A. Ridley, secretary. Its board of control comprises Messrs. D. G. Bardin, J. B. Barton, Ed Porter, S. J. White, R. E. McNeil and D. E. Horne. These officers are constantly endeavoring to secure the establishment of business enterprises of different kinds and in presenting the advantages of Live Oak to those who are seeking homes in a progressive community. Last November the city voted \$200,000 for street-paving, sewerage, water-works, city hall and fire department. An important enterprise here is the Live Oak Manufacturing Co., which operates an electric-light and power plant, ice factory, big saw and planing mill, and a plant where turpentine is extracted by the retort process from sawdust shavings, slabs and pine stumps. Its saw-mill has a capacity of 10,000 feet daily; planing mill 50,000 feet daily; a gang edger cuts 20,000 feet daily. Another saw-mill cuts 25,000 feet daily on a timber tract six miles distant, while another plant of equal capacity is further in the interior. The company's electric plant is of the most modern type. It has an Allen-Chalmers

Bullock generator equipment in two sections; engine built by Hardie-Tynes Manufacturing Co. of Birmingham, Ala.; a 650-horse-power Corliss type engine built by the Harrisburg (Pa.) Foundry and Machine Works; two vertical water-tube boilers of 250 horse-power each from Wickes Bros. of Saginaw, Mich.; three horizontal boilers of 150 horse-power from the Houston, Stanwood & Gamble Company of Cincinnati. The last-mentioned three boilers furnish steam for the drying department, pumping outfit and general use throughout the four acres of the plant. Two electric motors built by the General Electric Co. of Schenectady, N. Y., and the Fort Wayne (Ind.) Electric Works drive the saw and planing mill, respectively. Other machinery in position includes four General Electric motors, a Fairbanks-Morse underwriters' pumping outfit in a specially-constructed fire station, feed pumps, condensers, heaters, etc. The ice machinery consists of two 18-ton machines built by the Fred W. Wolf Company of Chicago, and a cold-storage department is now being added. George E. Porter is president; Edward Porter, vice-president, and George Porter, Jr., secretary-treasurer, of this important company.

#### HAZLEHURST.

[Special Cor. Manufacturers' Record.]

Hazlehurst, Ga., April 28.

Hazlehurst is a progressive little city. It has various industries, and there are opportunities for establishing others, the latter including a cottonseed-oil mill, as sufficient cottonseed is handled here to supply a plant. The leading business men are now endeavoring to form a company for this purpose. There is also a good opening here for an ice plant. As showing Hazlehurst's progress, mention may be made that from \$40,000 to \$50,000 will be expended to build a courthouse and jail, for which an architect is needed to furnish plans and specifications; also bonds will be issued to install water-works system, supply to be obtained from artesian wells and stored in elevated tanks. Information regarding these propositions can be obtained by addressing W. T. Patrick, who is one of the leading active business men here. The Young Men's Business League has been organized and intends to be active in promoting the advancement of Hazlehurst.

JOHN BANNON.

## INDUSTRIAL NEWS OF INTEREST

#### Wants to Sell Mica.

The North Carolina Mica & Monazite Co. of Lawndale, N. C., wants to correspond with users of ground mica.

#### The Concrete-Steel Co.

The Concrete-Steel Company of New York announces that its offices in that city have been removed to Suite 152 and 153, No. 29 Broadway.

#### Flat Cars for Sale.

Buyers of railway equipment will be interested to know that the Georgia Car Co. of Atlanta, Ga., offers for sale for immediate delivery a lot of entirely new-body 50,000-pound-capacity flat cars. Inquiries are invited.

#### Regarding Jos. H. Thompson, Jr.

Electrical and steam machinery purchasers are invited to note that Joseph H. Thompson, Jr., of New York city will remove his offices from No. 11 Broadway to 17 Battery Place. Mr. Thompson is well and widely known as a dealer in all kinds of machinery for electrical and steam usage, and his latest bargain list, No. 5, is now ready for delivery.

#### The Males Company.

Buyers of railway equipment are aware that the Males Company of New York is a prominent dealer in that line, and are asked to note that the company has removed its offices from 36 Wall street to 26 Cortlandt street.

#### Handle-Factory Proposition.

A proposition that will doubtless attract the attention of those who desire to make an investment in a handle factory is submitted by the Galax Handle Works of Galax, Va., which wants a man to invest \$1200 and take stock in the enterprise.

#### Wants Architect's Service.

The Manufacturers' Record is informed by one of its correspondents that an architect is needed to prepare plans and specifications for building a courthouse and jail at Hazlehurst, Ga.; from \$40,000 to \$50,000 to be expended. It is stated that inquiries can be addressed to W. T. Patrick of Hazlehurst.

#### Brick Works for Sale.

An established Southern brick plant is offered for sale. It has a capacity of 70,000

to have a capacity of 2000 barrels daily, which will be built at Center Furnace, Lawrence county, Ohio. The enterprise will be established by the Superior Portland Cement Co., which has organized with a nominal capital stock of \$10,000, and will increase to \$600,000 in a few days. Site has been purchased, comprising 8000 acres of land, a large part of which is said to be underlaid with six to eight feet of the purest limestone and shale and with a seam of coal three to three and one-half feet thick, suitable for cement purposes. Tests have been made to show that the best materials for Portland-cement purposes are found on this property. The new company is composed of well-known capitalists and coal operators. Mr. Justus Collins of Charleston, W. Va., is president, and J. A. Lathim, also of Charleston, secretary-treasurer. The principal stockholders are Messrs. Eugene Zimmermann of Toledo, Ohio; M. L. Sternberger of Jackson, Ohio; Hollins & Co. of New York, V. H. Kroger of Cincinnati, J. A. Renham of New York, H. A. Marting, F. C. Tomlinson and Mrs. Nannie H. Kelley of Ironton, Ohio. D. G. Wright of Philadelphia, and Justus Collins, Messrs. Sternberger, Marting, Wright, Collins and C. J. Milton are the directors.

#### Recent Fred W. Wolf Sales.

Demands throughout the country for ice and refrigerating machinery and for supplies needed in plants requiring that class of equipment continue to be large. The leading manufacturers of ice and refrigerating equipments are busily engaged in meeting the wants of buyers, and many important sales are being made. The Fred W. Wolf Company of Chicago obtains many of the contracts. It reports the following as among its most important recent sales: Craig Fish Products Co., Port Angeles, Wash., 40-ton refrigerating plant, including 10-ton ice plant; Morton Gregson Company, Chicago, for Nebraska City plant, 100-ton refrigerating machine; F. D. Radeke Brewing Co., Kankakee, Ill., 10-ton freezing system; Diebolt Brewing Co., Cleveland, 25-ton freezing and distilling system complete; Carbon Hill (Ala.) Utilities & Manufacturing Co., 10-ton ice plant; Louis Pfaelzer & Sons, Chicago, 40-ton refrigerating plant; Hazelwood Company, Ltd., Portland, Ore., 40-ton refrigerating plant; Groveton (Texas) Light & Ice Co., 15-ton ice plant; Independence (Kan.) Crystal Ice & Cold Storage Co., 25-ton ice plant; William Ellbrecht, Mason, Texas, five-ton ice plant; Windemere Ice Co., Cleveland, 60-ton ice plant; Isaac Lelsy Brewery, Cleveland, 25-ton freezing and distilling system; Western Packing & Provision Co., Chicago, 60-ton freezing and distilling system; Merchants' Cold Storage Co., Minneapolis, 20-ton refrigerating plant; West Texas Cold Storage & Ice Co., San Angelo, 15-ton ice plant; Mayo (Fla.) Electric & Water Co., five-ton ice plant; Onwentsia Club, Lake Forest, Ill., four-ton refrigerating plant; A. J. Cotshall, Darby, Pa., 100-ton refrigerating plant; Geo. L. Clayton, Seattle, 40-ton refrigerating plant, including 10-ton ice plant; Illinois State Penitentiary, Joliet, 1½-ton plate ice-making plant; Union Rendering Co., St. Joseph, Mo., 30-ton freezing system in two units; Gottfried Brewing Co., Chicago, 25-ton ice-making equipment; Lee Electric Light Co., Clarinda, Iowa, 15-ton ice plant; Rainey & Rogers, New Albany, Miss., 20-ton ice plant; Paola (Kan.) Ice Co., 25-ton ice plant; Franklin Brewing Co., Columbus, 50-ton complete ice-freezing system in two units; John B. Marshall, Greenville, S. C., 40-ton ice plant; Hygeia Ice Co., Ithaca, N. Y., 50-ton refrigerating machine, including 15-ton ice plant; A. G. Morse & Co., Chicago, 20-ton refrigerating plant; M. K. Goetz Brewing Co., St. Joseph, Mo., 25-ton freezing system; Kingtree (S. C.) Ice Co., six-ton ice plant; Union Slaughter-House Co., Montgomery, Ala., 20-ton refrigerating plant, and Braun & Pitts, Chicago, 65-ton brine cooler, brine tank and equipment. Many other contracts were also obtained by the Wolf interests.

#### TRADE LITERATURE.

##### Some Burroughs Literature.

The latest literature issued by the Burroughs Adding Machine Co. of Detroit, Mich., is a record of contests by champion operators on the Burroughs adding and listing machine. The records indicate what the ordinary operator can accomplish. They include listing and adding 500 bank checks of varying amount in nine minutes and nine seconds.

##### Small Direct-Current Motors.

Small direct-current motors, moderate and slow speeds, bi-polar type "Paragon," are described and accompanied by illustrations in Bulletin No. 605, which its manufacturer has issued. "Paragon" motors are well made, designed for constant service, and can be

installed on the floor, wall or ceiling. The Stanley-G. I. Electric Manufacturing Co. of Pittsfield, Mass., manufactures these motors.

#### The Wright Demand Indicator.

Electricians interested in demand indicators should read Bulletin No. 604, issued by the Stanley-G. I. Electric Manufacturing Co. of Pittsfield, Mass. This bulletin gives details about the Wright demand indicator, a maximum-recording ampere meter for either direct or alternating currents, and records the maximum current which has passed through it at any time since it was last set.

#### Inner Globes for Arc Lamps.

The successful operation of the modern enclosed arc lamp depends very largely on the proper selection of the inner globe. On account of high temperature of the arc, and also on account of the arc chamber having to be almost airtight, the glass of the inner globe must be very carefully selected and great care used in its manufacture. The Stanley-G. I. Electric Manufacturing Co. has had 15 years' experience in arc-lamp manufacture, and is presenting a little booklet which gives timely facts regarding its products in this direction. These inner globes are manufactured for any standard make of arc lamp. Write the company at Pittsfield, Mass., for copies of booklet.

#### About Good Cuts.

Well-designed advertisements, attractive catalogues and well-written illustrated articles are oftentimes robbed of their best features by the use of poor and badly-executed cuts. Too much attention cannot be paid to the quality of cuts to be used, as the story they tell cannot be told in words, and when they are poorly made they reflect to a great extent on those using them. In a folder recently sent out by Messrs. Gatchel & Manning of Philadelphia the merits of using good clean cuts are forcibly emphasized by the illustrations which it contains of the various departments of their factory. Messrs. Gatchel & Manning make any kind of drawing, design or engraving to print in one or more colors on a type-printing press.

#### Wm. B. Scaife & Sons Company.

The Wm. B. Scaife & Sons Company of Pittsburg, Pa., manufacturer of We-Fu-Go and Scaife water-softening and purifying systems, through the courtesy of a manufacturing company operating a 2000-horse-power boiler plant, was allowed the privilege of photographing two pages of the latter company's ledger. These two pages show the cost of operating the boiler plant with and without a water-softening and purifying system. The savings effected were far beyond the expectations of this user. These photographs have been reproduced in color and embodied in a folder, the outside having the appearance of a ledger. The Wm. B. Scaife & Sons Company will be pleased to send one of these folders to anyone interested.

#### Runyan Concrete-Block Machinery.

It would seem that cement is being generally recognized as the building material of the future. This is due largely to the high cost of lumber, brick and stone, and conditions have been met by the invention of machines for manufacturing concrete blocks. People who may contemplate engaging in the manufacture of concrete and other similar products are invited to investigate the Runyan machine for manufacturing them. The inventor of this equipment concentrated his efforts with the determination to surmount the difficulties encountered by other inventors of similar machinery, and claims that he has been entirely successful. An illustrated pamphlet is now being distributed which presents condensed facts regarding the Runyan concrete-block machines, and this information should be obtained by those who may be in a position to need this class of equipment. Messrs. C. M. Runyan & Co. of Elyria, Ohio, are the agents for the machine mentioned, and will be pleased to send details to inquirers.

#### The City Unburnable.

The city unburnable and the building on which it can be modeled is the subject of an illustrated booklet which is now being distributed for the benefit of architects, building contractors and building owners. This publication endeavors to show that it is not only possible, but practical to build a city in which the buildings could not burn. The subject of fireproof buildings is one of great interest at this time, especially in view of the recent conflagration at San Francisco and the big fire of two years ago in Baltimore, not to speak of the many disastrous fires of lesser extent which have occurred in other cities throughout the country and still continue to be reported from time to time. It is evident that the conflagration hazards can be minimized by erecting build-

ings which cannot be destroyed by fire within themselves and which are so protected as to the exterior that they cannot be destroyed by fires surrounding buildings. The pamphlet regarding the unburnable city is being distributed by the National Fireproofing Co. of Pittsburg, New York, Boston, Philadelphia, Cleveland, London and other cities. It tells about the steel and hollow-tile construction system which that company has perfected and for which it acts as engineer and contractor. No one interested in fireproof structures for any use of modern times can afford to omit an examination of "The City Unburnable." Write to any of the company's offices for a copy of the publication.

#### The Fuller Combing Gin.

The cotton growers, ginner and manufacturers of the South should not fail to investigate the claims made for the Fuller combining gin, which is offered as superior to other equipments of its class for cleaning cotton. The combining principle of the new gin might be termed an amalgamation of the principles of both the saw gin and the roller gin, that is, round-edge blades, simple construction and formed into short riblike parts to perform the function of the rib of the saw gin and the knife blade of the roller gin. This device, called a "combing finger," is made of hard steel. The fingers are smoothly finished, and are fastened with a cast-iron bar attached to the hinged breastgirt of the gin, and are thus interchangeable. The ginning cylinder consists of a series of cast-iron rings or spiders, three-quarters of an inch wide, into which self-locking needles fit. They are very accurately made, and when clamped together on the gin cylinder-shaft by the end nuts the needles are as firmly held as if they were in a solid piece of cast iron, yet on loosening this nut three turns the rings can be instantly separated and the needles which fit in their angular slots can be quickly taken out or replaced. The needles are made of the best steel, are highly polished and have a very fine spring temper, while their cost is said to be much less than a gin saw and their strength greater. The Fuller Combing Gin Co. of Charlotte, N. C., manufactures this gin, and claims that it has been amply demonstrated that combed cotton will grade higher than if ginned on the saw gin, and consequently will bring a higher price to the farmer on grade alone; that this value will be improved on classification of the staple, and still further increased when the mills take into consideration the spinning value of the cotton. The Fuller Combing Gin Co. proposes, in introducing its gin, to distribute freely to the cotton ginner of the South bulletins describing its machine and what the company and its customers are doing with the gin. The first bulletin is now ready, and copies of it can be obtained on application. The Manufacturers' Record of June 8, 1905, contained an illustrated description of the Fuller gin.

#### Perfection of Cement-Stone Making.

The art of producing stone by uniting various substances with some kind of cement has been practiced so long that its origin is lost in antiquity. Artificial stone is now being generally used in the building industry not only because of the increased prices of other classes of materials, but also because of the inherent qualities which recommend good cement stone to building owners, architects and contractors. A well-known writer and authority on cement recently said that in making cement stone it is necessary in the manufacturing process that the cement be supplied with all the water required for its complete crystallization at the time this change is taking place. The requirements of a perfect stone are claimed to be entirely fulfilled in Litholite, which is now being introduced and which is the invention of Charles W. Stevens, a veteran in the stonemaking industry. It is stated that Litholite is natural stone crushed to granular form and reproduced by a natural process in any desired form, color, grain, texture or design, and that the cementing material is vastly superior in endurance to that which originally held the stone together. The "Perfection of Stonemaking" is the title of a pamphlet which is now being distributed and which illustrates and describes Litholite. It presents timely data which should have the attention of building-stone manufacturers, architects, contractors and people who think of building. The Stevens stone is made by a wet process, without tamping or pressure, is practically waterproof, adapted to use in the highest class of buildings, and the rapidity with which it can be produced brings it into successful competition with brick or stone. Mr. Stevens holds numerous patents for improved ways and means of manufacturing artificial stone. In the pamphlet mentioned it is stated that stone made by him or under his patents can now be seen in more

than 3000 buildings, some of them among the best-known structures in the country. For instance, the Nassau-Beekman Building in New York is veneered to the third story with Stevens stone; the entire front of the Royal Bank of Canada in Havana is built of Stevens stone; the Hotel St. Paul, Green Bay, Wis., is built entirely of Stevens hollow blocks; the Carnegie Library, Guelph, Canada, is built entirely of Stevens cast stone. These and various others are pictured in the pamphlet. Over \$10,000,000 worth of buildings, it is stated, have been erected in which Stevens cast stone has been used. The interesting pamphlet here referred to can be obtained by addressing the Stevens Cast Stone Co., 147th street, Harvey, Chicago, Ill., which controls the patents of C. W. Stevens, who is president of the company.

#### Creative Power of Railroads.

[Wall Street Summary.]

We have become so accustomed to regard railroads as mere commercial agencies for transportation—gigantic creations of capital—that another side of their work has altogether escaped us. We have a general idea that when a railroad opens up a tract of virgin country land values increase and a few minor benefits flow to the residents in its immediate vicinity. We qualify this admission, as if we were ashamed of it, by the complementary reflection that an already soulless and grinding corporation is about to "grind" some more and add to its hoard thereby. This is altogether unjust and unmoral. The railroads are the greatest factors in the development of this or any other country. They open up to commerce and civilization unprofitable wastes that, far from the haunts of men, bid defiance to any other means of reclamation. Where the railroad leads civilization follows, habitations rise, forests are cleared, soil is cultivated, industry is rooted and towns—the nucleus of cities—spring up to attest the power of the steel sinews that stretch from our centers of population to remotest points, freighted with intelligence and advancement.

Nor is this all. Having sown the seed of progress, the railroad goes still further: it assists in the tilling of the crop. And it does so continually and not at sporadic intervals. The history of American colonization and internal development in the last 50 years is written on the pages that record the railroad construction of the country for that period. Early this month, from its terminus in St. Paul, the Northern Pacific started a train on a mission of enlightenment that must make for good. On board were a corps of instructors in agriculture, who were to address the farmers at all important points along that route between the Mississippi and the Pacific. Improved agricultural methods, advanced ideas on stock-raising and economic principles in farming were discussed and seeds of the best qualities distributed on this journey. The undertaking was conceived by Mr. James J. Hill, who believed that in such a manner the products and profits of the communities visited could be increased. The wisdom of the plan has been commended by other railroad managers in that section, and more of this "missionary" work is expected to follow.

Holding, with our esteemed contemporary, the MANUFACTURERS' RECORD of Baltimore, which years ago coined the phrase—the development of the South means the enrichment of the nation—and has consistently labored for its realization—the railroads in the Southwest are no less active. Although differing in method from those of the Northwest, their purpose is the same, to benefit and improve their territory. The methods of a colonizing agent have been resorted to, and, as the whole nation knows, with good results. Special trains at reduced rates are run for homeseekers throughout the region between Missouri and Texas; settlements have been planted here and there,



and persuasive inducements have been offered to residents in the Northern States to locate permanently in the South. The result of this campaign has borne fruit, for the press of the country now appears to be keenly alive to this project, which has always received support from the *Wall Street Summary*, as our Southern contemporaries freely admit.

That the railroads will benefit eventually by this contemplated improvement and expansion is doubtless true; but this in itself is a minor consideration with the resultant good to the communities themselves and to the nation at large. The paternalism of the railroads herein shown in an imperfect and fragmentary fashion is in marked contrast to the inconsiderate and intemperate attitude of certain legislators at Washington whose neglected duties the railroads are now performing. To curb or restrain the legitimate sphere of such activities by partisan or injudicious legislation will be a monumental blunder that must react most powerfully against the nation.

### The South's Progress.

[Southern Field.]

The South is emphatically a section for the man of small means. Indeed, it is not unusual to hear the criticism made that the problem of comfortable living is too easily solved—that the ease with which a competency is acquired in the South operates as a brake upon one's energies and serves to retard material growth. Of course, the answer to this is furnished by the South itself; in the indubitable statistics assembled from authoritative sources through which the public is kept informed of the actual progress being made by the several sections of the Union—statistics which show that the South, and particularly those portions of the South reached by the lines of the Southern Railway, is the most prosperous part of the country today.

The largest factor in this prosperity is the man of small means—the man who has established a small factory; a factory which soon becomes a large one—a small mercantile business, or has purchased a small tract of land and proceeded to create a home farm. The performance of this individual may be read in the recent statistics compiled by the MANUFACTURERS' RECORD covering the assessed valuation of property in the several Southern States in the year 1905, compared with 1900 and 1904, for while the South has witnessed some very large investments of capital, which have had their influence in bringing about the extraordinary enhancement which the MANUFACTURERS' RECORD points out—an increase of more than \$500,000,000 in the 12 months of 1905, and an excess of \$1,381,000,000 for the five-year period from 1900 to 1905—the important factor has been the work of a multitude of people of small means who have been adding their mite to this stupendous increase of material wealth.

There is another feature of this exhibit which commends itself in this connection. The 14 States included in the inquiry of the MANUFACTURERS' RECORD—Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Texas, Virginia and West Virginia—form a vast area of 830,275 square miles, and, of course, this increase in assessed values, which the MANUFACTURERS' RECORD points to as a significant measure of the industrial growth taking place in the South, necessarily varies in the different States. It is to be noted, however, that those States of the South where the lines of the Southern Railway are a leading factor in transportation continue to maintain their prestige—so far as this showing

may be accepted as an index—and in this respect serves as an additional corroboration of the statistical statements which have been printed in this publication from time to time for the information of investors and homeseekers. It has been consistently claimed that the greatest growth, the most prosperous conditions and the most advantageous opportunities are to be found in that great section of the South which has come to be denominated the "Southeast," composed, for the most part, of States thoroughly traversed by the Southern Railway and associated lines—Virginia, North and South Carolina, Georgia, Alabama, Mississippi, Kentucky and Tennessee. In this great section, constituting about 40 per cent. of the territory covered by the MANUFACTURERS' RECORD's investigation, 50 per cent. of the increase for 1905 over the previous year took place. The territory of the Southern Railway maintains its position of leadership in the material development of the South and the country, a position which its wonderful resources will sustain for an indefinite period in the future.

### The Iron and Metal Trades.

The *Iron Age* in its weekly review says: "So far as can be learned, only a few orders of some size footing up to 10,000 tons of structural steel have been placed for San Francisco delivery. In order to convey some definite impression what the steel requirements after a great fire amount to, we cited the fact last week that the orders from Baltimore to rebuild the burned district there to date amounted to 30,000 tons. This seems to have been interpreted in some quarters as an estimate of what San Francisco might use. Such an estimate, of course, would be altogether too low. The point is that even if it ran up to ten times the Baltimore tonnage during the next five years, which is considerably above conservative expert estimates, the structural mills of this country could readily meet the demand without straining present resources, and without creating any boom in the steel industry. The public has an altogether exaggerated idea of the steel requirements of the building industry. They strike the layman and are impressive, but the tonnage is not greater than that needed by the wire industry, for example.

"The steel-rail mills have booked orders aggregating 200,000 tons for 1907 delivery from three Western roads, and there are negotiations pending which will call for 300,000 tons more, and which will probably be closed within the next 10 days."

Galveston capital is interested in a steamship line between that city and Christiania, Norway, which will be in operation by next fall.

### Philadelphia Exhibition of the National Association of Hosiery Manufacturers.

The following is a list of a few prominent manufacturers who have reserved space and who will prepare exhibits: The Roessler & Hasslacher Chemical Co. The National Automatic Knitter Co. E. Jenckes Manufacturing Co. The Philadelphia Drying Machinery Co. Lowell Machine Shop. Cling Surface Manufacturing Co. Karl Schlatter Dye Works. The Oneida Community, Ltd. Ellis Brothers. Credit News Registry. Dennison Manufacturing Co. Klauder & Weldon Machine Co. Paxton & O'Neill. Morris & Co. Lewis Jones.

Dates of the exhibition, May 21 to 26. Manufacturers catering to the hosiery manufacturers' trade who have not secured space should at once address C. B. Carter, secretary-treasurer, care Continental Hotel, Philadelphia, Pa., who will supply full particulars. advt.

## FINANCIAL NEWS

The MANUFACTURERS' RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

### Review of the Baltimore Market.

Office MANUFACTURERS' RECORD.

Baltimore, Md., May 2.

The Baltimore stock market during the past week saw a further decline in the common stock and income bonds of the United Railways & Electric Co. Generally business was quiet, with declines in speculative issues.

In the trading United Railways common sold at 15; the trust certificates from 16½ to 15½; the income bonds from 71 to 68½; the income trust certificates from 70 to 67½, and the 4s from 92¼ to 92. Consolidated Gas sold from 86 to 85¼, and the 6s from 106 to 106½. Seaboard common was traded in at 30; the new common at 29, and the new second preferred at 59; Seaboard 4s from 87 to 86, and the 10-year 5s from 103 to 102½, and ex-coupon at 100½. Cotton Duck 5s went from 85½ to 83½; G. B. & S. common from 8½ to 8¼; the incomes from 33¼ to 32, and the 1sts from 60 to 60½.

Bank stocks sold as follows: Mechanics', 25½ to 25¼; Citizens', 28; Marine, 38½; Maryland, 22½.

Other securities were dealt in thus: Georgia Southern & Florida second preferred, 84; Northern Central, 100 to 99½; Houston Oil common, 8 to 7½; do. preferred, 41; Atlantic Coast Line 4s, 99½ to 98½; Atlantic Coast Line rights, 4½ to 3½; do. Connecticut, 48 to 50; Atlantic Coast Line of Connecticut 5s, certificates, 110 to 111½; do. do. 4s, certificates, 91½ to 92; do. do. 4s, certificates, 5-20s, 92; Atlantic Coast Line new 4s, certificates, 92 to 91; Baltimore City 3½s, 1940, 107 to 106½; do. 4s, 1926, 110; Baltimore, Sparrows Point & Chesapeake 4½s, 97¼ to 97; Georgia & Alabama 5s, 110¼; Alabama Consolidated Coal & Iron 5s, 93; North Carolina 6s, 130; Merchants & Miners' Transportation Co., 180; Maryland & Pennsylvania stock, 27; Macon Railway & Light 5s, 100; Norfolk Railway & Light 5s, 102¼, and ex-coupon 99½; Wilmington, Columbia & Augusta 6s, 108; West Virginia Central 6s, 108 to 108½; Lexington Railway 5s, 104¼; Norfolk & Carolina 1sts, 116; Suffolk & Carolina 1st 5s, 99½; Northern Central 4½s, 108½; Virginia Midland 2ds, 108½.

### SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended May 2, 1906.

Railroad Stocks.	Par.	Bid.	Asked.
Atlanta & Charlotte.....	100	191	195
Atlantic Coast Line.....	100	143	...
Atlantic Coast Line of Conn.....	100	325	345
Maryland & Pennsylvania.....	100	27	...
Norfolk Railway & Light.....	25	17½	18½
Seaboard Railway Common.....	100	29½	31
Seaboard Company Common.....	100	27	29
Seaboard Company 2d Pref.....	100	55	58½
United Railways & Elec. Co.....	50	15	15½

Bank Stocks.	Par.	Bid.	Asked.
Citizens' National Bank.....	10	27½	...
Commercial & Far. Nat. Bank.....	100	130	140
Com. & Far. Nat. Bk., Blue Cfs.....	100	140	150
Drovers & Mech. Nat. Bank.....	100	235	...
Farmers & Mer. Nat. Bank.....	40	50	55
Maryland National Bank.....	20	...	23½
Merchants' National Bank.....	100	181	186
National Bank of Baltimore.....	100	...	120
National Marine Bank.....	30	27	29
National Mechanics' Bank.....	10	25½	...

Trust, Fidelity and Casualty Stocks.	Par.	Bid.	Asked.
Continental Trust.....	100	194	196
Fidelity & Deposit.....	50	...	136
Fidelity Trust.....	100	215	235
International Trust.....	100	150	154
Maryland Casualty.....	25	82	85
Maryland Trust Pref.....	100	125	130
Mercantile Trust & Deposit.....	50	142	145
U. S. Fidelity & Guaranty.....	100	130	135

Miscellaneous Stocks.	Par.	Bid.	Asked.
Ala. Con. Coal & Iron Pref.....	100	92	92½
Consolidated Gas.....	100	82½	85
Consolidated Cotton Duck Com. 50	...	...	12½
Consolidated Cotton Duck Pfd. 50	...	...	34
Consolidation Coal.....	100	...	95½
G. B. & S. Brewing Co.....	100	8¼	8½

Railroad Bonds.	Par.	Bid.	Asked.
Albany & Northern 5s, 1946.....	94	...	...
Atlanta & Charlotte 1st 7s, 1907.....	103½	104	...
Atlan. Coast Line 1st Con. 4s, 1962.....	98½	98½	...

Atlantic Coast Line (Conn.) 5s.....	112½	...
Atlantic Coast Line (Conn.) 4s.....	91	...
Carolina Central 5s, 1946.....	96	...
Charleston & West. Car. 5s, 1946.....	110	111
Coal & Iron Railway 5s, 1920.....	104½	105½
Georgia & Alabama 5s, 1945.....	110½	111½
Georgia, Car. & North. 1st 5s, 1929.....	100	111
Georgia Pacific 1st 6s, 1922.....	120	122½
Georgia South. & Fla. 1st 5s, 1945.....	113	114
Petersburg, Class A 5s, 1926.....	113½	...
Savannah, Fla. & West. 5s, 1934.....	115	116½
Seaboard Air Line 4s, 1951.....	94½	96½
Seaboard Air Line 5s, 10 year, 1911.....	100½	101
Seaboard Air Line 5s, 3 year.....	99½	...
South Bound 5s, 1911.....	110	...
Southern Railway Con. 5s, 1894.....	115	116
Suffolk & Carolina 5s, 1952.....	100	...
Virginia Midland 5th 5s, 1926.....	110½	111
Western Maryland new 4s, 1952.....	84	85
West Virginia Central 1st 6s, 1911.....	108½	109½
Wilmington & Wel. Gold 5s, 1935.....	118½	...

Street Railway Bonds.	Par.	Bid.	Asked.
Baltimore City Passenger 5s, 1911.....	104	...	...
Central Ry. Con. 5s (Balt.), 1932.....	117½	...	...
Electric 5s, 1909.....	97	...	...
City & Suburban 5s (Wash.), 1948.....	105	...	...
Lake Roland Elev. 5s (Balt.), 1942.....	117	...	...
Lexington Railway 1st 5s, 1949.....	104½	...	...
Macon Rwy. & Lt. 1st Con. 5s, 1953.....	99½	100	...
Norfolk Railway & Light 5s.....	99½	100	...
Norfolk Street Railway 5s, 1944.....	112	...	...
North Baltimore 5s, 1942.....	120	...	...
United Railways 1st 4s, 1949.....	91½	92½	...
United Railways Inc. 4s, 1949.....	68½	69½	...

Miscellaneous Bonds.	Par.	Bid.	Asked.
Alabama Consol. Coal & Iron 5s.....	90½	90½	...
Consolidated Gas 5s, 1933.....	106½	107	...
Consolidated Gas 4½s, Cfs.....	98½	98	...
G. B. & S. Brewing 1st 3-4s.....	60	60½	...
G. B. & S. Brewing 2d Income.....	32	...	...
Maryland Steel 5s.....	103½	...	...
Maryland Telephone 5s.....	97	...	...
Mt. V. & Woodly's Cot. Duck 5s.....	83	84	...

### SOUTHERN COTTON-MILL STOCKS

Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending April 30.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	96	99
Alken Mfg. Co. (S. C.).....	85	90
Anderson Cotton Mills (S. C.).....	104	106
Arkwright Mills (S. C.).....	120	123
Augusta Factory (Ga.).....	80	85
Avondale Mills (Ala.).....	98	...
Babb Mill (S. C.).....	109	112
Bibb Mfg. Co. (Ga.).....	119	122
Brandon Mills (S. C.).....	109	111
Cabarrus Cot. Mills (N. C.) new.....	120	120
Chadwick Mfg. Co. (N. C.) Pfd.....	102	...
Chiquola Mfg. Co. (S. C.).....	90	91
Clifton Mfg. Co. (S. C.).....	123	127½
Clifton Mfg. Co. (S. C.) Pfd.....	102	105
Clinton Cotton Mills (S. C.).....	135	145
Columbus Mfg. Co. (Ga.).....	98	...
Courtenay Mfg. Co. (S. C.).....	100	100
Dallas Mfg. Co. (Ala.).....	95	95
Darlington Mfg. Co. (S. C.).....	60	62
Engle & Phenix Mills (Ga.).....	125	126
Esley Cotton Mills (S. C.).....	132	133
Enoree Mfg. Co. (S. C.).....	77	90
Enoree Mfg. Co. (S. C.) Pfd.....	100	102
Enterprise Mfg. Co. (Ga.).....	86	92
Exposition Cotton Mills (Ga.).....	200	...
Gaffney Mfg. Co. (S. C.).....	85	90
Gainesville Cotton Mills (Ga.).....	29	30
Granby Cot. Mills (S. C.) 1st Pfd.....	66	66
Graniteville Mfg. Co. (S. C.).....	160	165
Greenwood Cotton Mills (S. C.).....	96	...
Grendel Mills (S. C.).....	110	115
Henrietta Mills (N. C.).....	200	...
King Mfg. Co., John P. (Ga.).....	97	103
Lancaster Cotton Mills (S. C.).....	102	106
Lancaster Cot. Mills (S. C.) Pfd.....	97	...
Langley Mfg. Co. (S. C.).....	82	96
Laurens Cotton Mills (S. C.).....	160	164
Limestone Mills (S. C.).....	104	...
Lockhart Mills (S. C.).....	100	102
Lockhart Mills (S. C.) Pfd.....	97	100
Louise Mills (N. C.).....	94	...
Louise Mills (N. C.) Pfd.....	102	...
Marlboro Cotton Mills (S. C.).....	73	76
Mayo Mills (N. C.).....	165	185
Mills Mfg. Co. (S. C.).....	105	...
Mills Mfg. Co. (S. C.) Pfd.....	100	...
Monaghan Mills (S. C.).....	104	104
Monroeh Cotton Mills (S. C.).....	110	116½
Newberry Cotton Mills (S. C.).....	107	110
Norris Cotton Mills (S. C.).....	107	110
Odell Mfg. Co. (N. C.).....	88	91
Orangeburg Mfg. Co. (S. C.) Pfd.....	80	97
Orr Cotton Mills (S. C.).....	101	104
Pacolet Mfg. Co. (S. C.).....	177	...
Pacolet Mfg. Co. (S. C.) Pfd.....	102	104
Pelzer Mfg. Co. (S. C.).....	169	173
Piedmont Mfg. Co. (S. C.).....	169	171
Pine Mfg. Co. (S. C.).....	125	128
Raleigh Cotton Mills (N. C.).....	90	95
Riohland Cot. Mills (S. C.) Pfd.....	51	56
Roxboro Mills (N. C.).....	144	150
Saxon Mills (S. C.).....	100	105
Silley Mfg. Co. (Ga.).....	64	68
Southern Cotton Mills (N. C.).....	80	...
Spartan Mills (S. C.).....	140	146
Springdale Mills (S. C.).....	100	...
Trion Mfg. Co. (Ga.).....	131	142
Tucupau Mills (S. C.).....	160	165
Victor Mfg. Co. (S. C.).....	113	116
Warren Mfg. Co. (S. C.).....	97	99
Warren Mfg. Co. (S. C.) Pfd.....	105	...
Washington Mills (Va.).....	18	28
Washington Mills (Va.) Pfd.....	95	99
Whitney Mfg. Co. (S. C.).....	143	150
Wiscasset Mills (N. C.).....	122	136
Woodruff Cotton Mills (S. C.).....	105	106½

Quotations Furnished by William S. Glenn, Broker, Spartanburg, S. C., for Week Ending April 30.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	95	99
Aetna Cotton Mills (S. C.) Pfd.....	70	...
Alken Mfg. Co. (S. C.).....	85	90
American Spinning Co. (S. C.).....	109	109
Anderson Cotton Mills (S. C.).....	103	106
Arcadia Mills (S. C.).....	89	93
Arkwright Cotton Mills (S. C.).....	120	...
Augusta Factory (Ga.).....	80	86
Avondale Mills (Ala.).....	87	...
Belton Mills (S. C.).....	108	110
Bibb Mfg. Co. (Ga.).....	100	100
Brandon Mills (S. C.).....	108	112
Brogan Mills (S. C.).....	77	80
Cabarrus Cotton Mills (N. C.).....	137	...
Chadwick Mfg. Co. (N. C.) Pfd.....	103	103
Chiquola Mfg. Co. (S. C.).....	90	100
Clifton Mfg. Co. (S. C.).....	125	130
Clifton Mfg. Co. (S. C.) Pfd.....	103	103
Clinton Cotton Mills (S. C.).....	135	140

Columbus Mfg. Co. (Ga.).....	94	97
Courtenay Mfg. Co. (S. C.).....	100	103
Dallas Mfg. Co. (S. C.).....	89	96
Darlington Mfg. Co. (S. C.).....	60	66
D. E. Converse Co. (S. C.).....	115	...
Eagle & Phenix Mills (Ga.).....	120	...
Eastley Cotton Mills (S. C.).....	127	132
Enoree Mfg. Co. (S. C.).....	85	90
Enoree Mfg. Co. (S. C.) Pfd.....	100	103
Enterprise Mfg. Co. (Ga.).....	82	90
Exposition Cotton Mills (Ga.).....	174	200
Galiney Mfg. Co. (S. C.).....	85	90
Galveston Cotton Mills (Ga.).....	24	...
Glenwood Cotton Mills (S. C.).....	102	105
Gluck Mills (S. C.).....	97	...
Granby Cot. Mills (S. C.) 1st Pfd.....	50	...
Granville Mfg. Co. (S. C.).....	157	...
Greenwood Cotton Mills (S. C.).....	95	...
Grendel Mills (S. C.).....	110	...
Hartsville Cotton Mill (S. C.).....	90	...
Henrietta Mills (N. C.).....	200	...
Inman Mills (S. C.).....	80	87
King Mfg. Co. J. P. (Ga.).....	97	103
Lancaster Cotton Mills (S. C.).....	100	106
Lancaster Cot. Mills (S. C.) Pfd.....	95	99
Langley Mfg. Co. (S. C.).....	92	96
Laurens Mills (S. C.).....	170	...
Limestone Mills (S. C.).....	104	...
Lockhart Mills (S. C.).....	99	102
Lockhart Mills (S. C.) Pfd.....	101	...
Loray Cotton Mills (N. C.) Pfd.....	89	94
Louise Mills (N. C.).....	102	...
Louise Mills (N. C.) Pfd.....	102	...
Marlboro Cotton Mills (S. C.).....	67	75
Mayo Mills (N. C.).....	150	200
Mills Mfg. Co. (S. C.).....	100	...
Mills Mfg. Co. (S. C.) Pfd.....	99	101
Molloy Mfg. Co. (S. C.).....	89	93
Monaghan Mills (S. C.).....	99	104
Monarch Cotton Mills (S. C.).....	84	89
Newberry Cotton Mills (S. C.).....	115	...
Ninety-Six Cotton Mills (S. C.).....	95	...
Norris Cotton Mills (S. C.).....	100	106
Odell Mfg. Co. (N. C.).....	90	...
Orangeburg Mfg. Co. (S. C.) Pfd.....	80	...
Orr Cotton Mills (S. C.).....	101	105
Pacolet Mfg. Co. (S. C.).....	177	...
Pacolet Mfg. Co. (S. C.) Pfd.....	102	104
Pelzer Mfg. Co. (S. C.).....	170	173
Piedmont Mfg. Co. (S. C.).....	170	175
Poe Mfg. Co. F. W. (S. C.).....	125	130
Raleigh Cotton Mills (N. C.).....	100	...
Richland Cotton Mills (S. C.) Pfd.....	50	...
Roanoke Mills (N. C.).....	118	...
Saxon Mills (S. C.).....	102	104
Sibley Mfg. Co. (Ga.).....	58	63
Southern Cotton Mills (N. C.).....	80	...
Spartan Mills (S. C.).....	145	...
Springstein Mills (S. C.).....	100	...
Trion Mfg. Co. (Ga.).....	132	140
Tucupau Mills (S. C.).....	111	115
Victor Mfg. Co. (S. C.).....	111	115
Warren Mfg. Co. (S. C.).....	95	102
Warren Mfg. Co. (S. C.) Pfd.....	107	...
Washington Mills (Va.).....	17	22
Washington Mills (Va.) Pfd.....	93	96
Whitney Mfg. Co. (S. C.).....	145	...
Wicasset Mills (N. C.).....	119	125
Woodruff Cotton Mills (S. C.).....	108	108

### Tool Company's Statement.

The Chicago Pneumatic Tool Co. reports for the first quarter of 1906 profits \$233,322. Less depreciation of plant and buildings, bond interest and sinking-fund reserve, there was left a net profit of \$155,744, out of which was paid a quarterly dividend of \$61,087, leaving \$94,656, which was carried to surplus. The surplus account shows that at the end of 1905 there was a total of \$536,292, out of which was appropriated \$25,000 for building the plant at Fraserburgh, leaving a balance of \$511,292, and this, added to the surplus of the first quarter of 1906, makes the present surplus \$605,949. The business of the company for the month of April is said to be about 10 per cent. in excess of the same period last year. President J. W. Duntley says that since the organization of the company, little more than four years ago, it has disbursed \$1,120,881 in dividends to its stockholders, besides \$460,000 in interest on its bonds and \$200,000 to the sinking fund for the retirement of the bonds, not including the bond interest and sinking-fund reserve in the present quarterly statement.

### Bankers' Encyclopedia.

The Bankers' Encyclopedia, Vol. XXIII, for March, 1906, has been issued by the Bankers' Encyclopedia Co., Suite 1402-77, East Jackson Boulevard, Chicago. It is handsomely printed on calendared paper, is bound in blue cloth with gold lettering, and is provided with a thumb index for ready reference to its more than 1100 large pages. The book embodies "a new and original compilation of the banks, bankers, savings banks and loan and trust companies in the United States and Canada, giving full statements of their liabilities, resources, names of officers, reserve agents and correspondents and other valuable information devoted to the interests of banks, bankers, attorneys and merchants." Separate maps of each of the States are bound with the volume.

### New Corporations.

The Farmers' Bank of Seaboard, N. C., has been authorized to begin business with \$5000 capital.

The Garza State Bank of Garza, Texas, is reported to have begun business with \$10,000 capital.

It is reported that O. B. Key of Snyder, O. T., contemplates establishing banks at Hobart and Lawton, I. T.

The Williamston Building and Loan Association of Williamston, S. C., capital \$50,000, has been granted a charter.

The Natchez Realty Co. of Natchez, Miss., capital \$20,000, has been chartered by R. E. Reed, R. M. Baker, R. E. Bost and others.

The First Bank of Hartman, Ark., has been incorporated with D. K. Adkins, president; Robert Phillips, treasurer, and R. A. Blakley, cashier.

The Farmers' State Bank of Headrick, O. T., has been incorporated with \$10,000 capital by Frank M. Miller, Robert L. Bailey and Leander Chaney.

The Bank of Heath Springs at Heath Springs, S. C., capital \$15,000, has been incorporated by Leroy Springs, W. S. Moore, J. A. Bridges and others.

The Title Guarantee Abstract Co. of Dalhart, Texas, capital \$5000, has been incorporated by Robert S. Rogers, R. H. Osborne and W. B. Montgomery.

The State Savings Bank of Hattiesburg, Miss., has been incorporated with \$250,000 capital by J. P. Carter, F. L. Peck, J. T. Jones, L. L. Mayor and others.

The First National Bank of Teague, Texas, capital \$50,000, has organized with W. E. Richards, president; M. Sweeney, vice-president; E. B. St. Clair, cashier.

The People's Bank of Brevard, N. C., with \$100,000 authorized capital, has been granted a charter. The incorporators are R. C. Clarke, W. P. Whitmire and others.

The officers of the Merchants' National Bank of Lehigh, I. T., recently approved, are J. A. Jackson, president; Wm. Menton, vice-president, and Frank L. Bloomer, cashier.

A new national bank with \$50,000 capital is reported organized at Glasgow, Ky., by J. P. Depp, president; L. W. Preston, cashier, and E. F. Jewell, assistant cashier.

It is reported that a new bank is to be established at Marble City, I. T., by E. Bee Guthrey of Marble City, A. W. Pipes of Laredo, Mo., and W. A. Reger of Reger, Mo.

The Overton County Bank of Livingston, Tenn., will, it is said, soon begin business with \$25,000 capital. Judge W. W. Goodpasture will be president, and Will H. Estes, cashier.

The Southern Chattel Loan Co. has been incorporated at Baltimore, Md., with \$5000 capital by W. F. Roberts, J. C. Roemer, Anna M. Roberts, Conrad Roemer and Clement J. M. Hunt.

The Planters and Mechanics' National Bank has been organized at Oklahoma City, O. T., with \$25,000 capital. The incorporators are N. M. Ellis, J. E. Ware, H. L. Foster and A. M. Gustin.

The Cherokee Land & Trust Co. of Gaffney, S. C., capital \$10,000, has been granted a charter. The officers are Chas. Baker, president; Avery Patton, vice-president, and J. B. Bruce, treasurer.

The Courtland Building Association has been incorporated at Baltimore, Md., with \$200,000 capital by Bernard Meyer, Fritz Schmidt, Frederick W. Roerentrop, Karl Schmidt and Wm. A. McClymont.

The First National Bank of Hastings, O. T., capital \$25,000, has elected the following officers: W. P. Carden, president; B. A. Johnson, vice-president; J. B. Steele, cashier and A. C. Savage, assistant cashier.

The Bank of Vinson at Vinson, O. T.,

capital \$10,000, has been granted a charter. The incorporators are R. L. Thompson, G. T. Bray, James Duffy, William Clements, J. B. Overton and H. Mathewson.

The Mutual Bank & Trust Co. of Chattanooga, Tenn., capital \$1000, is reported to have made application for a charter, the incorporators being C. E. Nelson, L. B. McDaniels, J. G. Bone, J. C. Ware and E. H. Cravens.

The National Bank of Americus, Ga., capital \$100,000, has made application for a charter. M. M. Lowrey, a successful Dawson banker, will be president, and State Senator Crawford Wheatley of Americus, vice-president.

The Citizens' Banking Co., with \$50,000 capital, is being organized at Baxley, Ga., among the stockholders being W. R. Beach of Waycross, Dr. J. E. Overstreet, W. W. Bennett, E. E. Mims, W. W. Graham, J. W. Tippins and others.

The Hibernia Bank of Savannah, Ga., announces that it will on May 1 open for business at No. 19 Bay street east with \$200,000 capital and \$50,000 surplus. M. A. O'Byrne is president; Charles Ellis, first vice-president; Louis P. Hart, second vice-president, and Joseph W. Heffernan, cashier.

The Bank of Salley at Salley, S. C., has been granted a charter. The directors are J. B. Salley, H. J. Salley, H. A. Salley, C. H. Salley, H. M. Salley, H. M. Dibble, Henry Busch, Sr., and W. P. Hutto. Dr. H. J. Salley is president; C. H. Salley, secretary and treasurer, and G. L. Sawyer, vice-president.

The Elgin National Bank, which is a conversion of the Bank of Elgin at Elgin, Texas, is reported to have begun business with W. H. Rivers, president; P. C. Wells, vice-president; James Keeble, cashier, and W. H. Rivers, Jr., assistant cashier; directors, P. C. Wells, I. B. Mafsing, W. P. Culp, A. H. Carter and J. C. Orgain.

The New State Fire Insurance Co., capital \$500,000, with \$100,000 paid in, has been chartered at South McAlester for the purpose of operating in Indian Territory. The incorporators are F. C. French and John F. Hicks, president and vice-president, respectively, of Oklahoma City, and H. F. George, secretary and treasurer, of South McAlester.

The Keystone Life Insurance Co. of New Orleans, La., capital \$100,000, has filed articles of incorporation. The officers are L. P. Delahoussaye, president; Adam Wagatha, vice-president; Jacob Nienaber, second vice-president; William Sparling, secretary; William Pfa, treasurer; Robert Maloney, attorney, and John T. Crebbin, medical director.

The Kirkwood Savings Bank at Kirkwood, Mo., is reported to have filed articles of incorporation; capital \$20,000. The incorporators are Oscar Lins, Bellefontaine; W. T. Mars, George Kerth, Jr., B. F. Andrae, J. H. Berg and H. H. Hyatt, all of Kirkwood; Charles F. Potter, Sappington; J. W. Perry, Wellston, and Joseph B. Greensfelder of Clayton.

The MANUFACTURERS' RECORD is informed that the Bank of Washington County at Vinegar Bend, Ala., has been organized with a paid-up capital of \$10,000; officers, H. O. McMain, Citronelle, Ala., president; N. E. Turner, vice-president, and A. Rhett Turner, cashier, both of Vinegar Bend, Ala. Address all communications to H. O. McMain, president, Citronelle, Ala.

A new bank is reported organized at Highland, Howard county, Maryland, with the following officers: Dr. W. W. L. Cissel, president; Samuel H. Hopkins, first vice-president; Samuel A. Nichols, second vice-president; Henry Sewell Brady, third vice-president and counsel; John Jager, fourth vice-president; Dorsey W. Cashell,

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secretary; William H. Marlow, assistant secretary and cashier. The executive committee will consist of Albert Nichols, chairman; Dorsey W. Cashell, Samuel H. Hopkins, George D. Day, Michael H. Cooney, Benjamin M. Hill, William H. Rannie and William T. Scrivonor.

[For Additional Financial News, See Pages 44 and 45.]



**See**